STRENGTHENING FOREST MANAGEMENT IN INDONESIA THROUGH LAND TENURE REFORM:

ISSUES AND FRAMEWORK FOR ACTION

FOREST TRENDS

mfp MULTISTAKEHOLDER FORESTRY PROGRAMME

RIGHTS + RESOURCES

IHSA

Greenomics Indonesia

World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

The World Bank

DFID Department for International Development

FORD FOUNDATION

COLLABORATING INSTITUTIONS

Forest Trends (http://www.forest-trends.org): Forest Trends is a Washington, D.C.-based nonprofit organization advocating market-based approaches to conserving forests outside of protected areas. In addition to promoting markets for some of the ecosystem services provided by forests, Forest Trends also supports markets for sustainably-produced forest products and markets that bolster the livelihoods of forest-based communities. To promote these markets, Forest Trends brings together leading agents in industry and finance with representatives from governments and non-governmental organizations (NGOs) concerned with forests. In addition, Forest Trends generates and disseminates critical

World Agroforestry Centre (http://www.worldagroforestrycentre.org): The World Agroforestry Center (ICRAF), headquartered in Nairobi, Kenya, is part of the Consultative Group on International Agricultural Research. ICRAF's primary mission is to advance the science and practice of agroforesty and in doing so, transform the lives and landscapes of the rural poor in developing countries. ICRAF operates in over 20 countries throughout the tropics. ICRAF program research areas are *Land and People, Trees and Markets, Environmental Services and Strengthening Institutions* Policy research cross-cuts each of these programs.

AUTHOR CONTACTS

Dr. Arnoldo Contreras-Hermosilla (mitcon1720@aol.com) is a forest governance analyst and a Forest Trends Fellow.

Chip Fay (cfay@cgiar.org) is a Senior Policy Analyst at the World Agroforestry Center and based in Bogor, Indonesia.

STRENGTHENING FOREST MANAGEMENT IN INDONESIA THROUGH LAND TENURE REFORM:
ISSUES AND FRAMEWORK FOR ACTION

Arnoldo Contreras-Hermosilla, Forest Trends, and Chip Fay, World Agroforestry Centre

With contributions from Elfian Effendi, Juni Thamrin, Sulaiman Sembiring, Martua Sirait and the Institut Pertanian Bogor

Strengthening Forest Management in Indonesia through Land Tenure Reform: Issues and Framework for Action

ISBN: 0-9713606-7-7

Cover photo, showing state-owned forest under agricultural production and community-managed forest under tree cover, by Chris Bennett

ACKNOWLEDGMENTS

Many people gave advice and analytical support to this study. We thank Elfian Effendi, Harry Santoso, Sulaiman Sembiring, Juni Thamrin, and the Institut Pertania Bogor for their valuable inputs to the report. We would like to thank in particular the following persons that issued comments on an earlier version of this report: Charles Barber, Marcus Colchester, Cinnamon Dornsife, Owen Lynch, Robin Mearns, Gamal Pasya and Andy White. We are grateful to Chris Bennett who also supplied analytical inputs from the outset, with separate support from the UK Department for International Development (DfID), and coordinated the work of Indonesian consultants. We would also like to acknowledge support from the Ford Foundation and the DfID Multistakeholder Forestry Programme. Andy White guided the study for Forest Trends and Robin Mearns guided the study for the World Bank. Despite our gratitude for their insights and support, none of the above is responsible for errors that may still be present in the report. These remain our own.

This study was conducted by invitation of the World Bank as an input to the preparation of a Forests Strategy for Indonesia. Forest Trends and the World Agroforestry Centre would like to express appreciation to the World Bank for encouraging their work on forest tenure in Indonesia and to the Investment Center of the United Nations Food and Agriculture Organization, which provided financial support. The findings and recommendations expressed in this paper are those of the authors and do not necessarily reflect the opinions and policies of the World Bank, its Executive Directors or the countries they represent, or of DFID or the FAO.

PREFACE

Indonesia has been facing dramatic challenges to protect and manage its forest resources. The archipelago is well known not only for the extraordinary biodiversity and productivity of its forests, but also for its high rates of deforestation and illegal logging, its catastrophic fires, and the social tensions over forest rights between the government and indigenous and other local communities. Confusion and disagreement over who should control or own Indonesia's forests are widely seen as the underlying sources of many, if not most, of the challenges Indonesia faces in managing its forest estate. The origins of this confusion lie in large part in simplistic interpretations of what and where Indonesia's forests are. Research on land use and remote sensing data has revealed that significant areas of what Indonesia's Department of Forestry defines as the "Forest Zone" are in fact community-planted agroforests (fruit, resin producing and timber trees), agricultural lands or grasslands. These areas are currently regulated as if they still are natural forests or lands to be reforested for timber production. Such an approach often results in conflicts and injustice. For example, many local communities who are planting agroforests on their customary lands find their access and rights to use these lands greatly restricted by forest regulations. They face disincentives to increase land productivity and to manage resources in sustainable ways. In many cases they have unfairly and arbitrarily been forced off their customary lands, thus creating social tensions and conflicts that raise considerable obstacles to the improved management of the resource base as well as to environmental conservation and poverty alleviation. Eviction is justified in the name of protecting environmental services, but local people often spontaneously best protect these services by planting forest gardens, eliminating the need for regulation. In other cases these environmental values plainly are no longer present and therefore can hardly justify government regulatory intervention.

Improving the management of Indonesia's remaining natural forests (protected and production areas) as well as timber plantations – in a manner that respects communities rights and maintains forest environmental services – requires a balance of public and private responsibilities. To achieve this, a more sophisticated understanding of the social, economic and environmental factors at play in the various types of landscapes in Indonesia is necessary. Such an understanding will contribute to a better identification of priorities for which forests require focused efforts on sustainable management and which areas that are currently controlled by the Department of Forestry would best have land use decisions de-regulated or devolved to provide broader options and better livelihood opportunities for local people.

This process is, in fact, partially underway, although progress has been slow and government commitment limited. The recognition of local ownership has progressed in the agricultural sector and various innovations in limited local use rights have been introduced in the forest sector as well. At the same time, a large number of studies and debates continue to focus on forest tenure. Nonetheless, government officials, local communities, donors and other stakeholders have not yet managed to mobilize the political will, social support and economic means to build on these innovations and facilitate the transition to a more rational, more respectful and ultimately more effective Forest Zone.

Since the Dutch colonial period, Indonesian policy makers have viewed forest resources as being the exclusive responsibility of the central government. The government's approach to managing the forest estate has typically been one of large industrial concessions awarded to a select set of private sector firms, all geared towards spurring industrial development, energizing national economic development and securing public claims on territory. With the end of the New Order, greater freedom of expression and

the relative weakening of an overly centralized and authoritarian state have opened new opportunities for the policy debate on forests.

In this new context, it has become more and more evident that the conventional approach to forest management – intense industrial utilization of the nation's forest resources – led not only to severe deterioration of the condition of forest-dependent rural communities but also to massive deforestation, great environmental degradation and widespread corruption and illegal logging. Greater recognition of the social, environmental and economic costs of this approach has led to a growing consensus concerning the need to search for ways to strengthen tenure security for local communities and improve the administration of the nation's resources.

The purpose of this analysis is to help policy makers and the many stakeholders in Indonesia develop a vision and a plan to advance tenure reforms and strengthen forest management systems. Its intention is to contribute to ongoing efforts to formulate a new paradigm for forest management in Indonesia. It focuses primarily on the fundamental question of the legal and biophysical rationale upon which the concept of the State Forest Zone is based. This analysis addresses the question of land ownership and sustainable forest resource management. It challenges the widely accepted view that the government, through the Department of Forestry, has jurisdiction over land administration within the Forest Zone.

Recommendations, aimed at contributing to the development of a new paradigm, center on the recognition that the Basic Agrarian Law which governs land ownership is valid on all of Indonesian lands. Likewise, it is recognized that a rationalization process is needed to identify what types of forests require careful regulation, where they are and who is best positioned to manage them.

Although increasing community forest tenure security is a critical first step, it is only one of many on the road to a better management of Indonesia's forest and agroforest resources. Moreover, its effectiveness will depend on the general policy environment affecting the sector. Improving the management of the sector will need major changes across the political and institutional environment of Indonesia. Our hope is that this analysis contributes not only to stronger tenure reform, but also to the wider policy debate on the future of Indonesia's forest resources and the humans and other species that depend upon them.

Michael Jenkins
President, Forest Trends

Meine van Noordwijk
Regional Coordinator, Principal Scientist,
World Agroforestry Centre, Southeast Asia Office

TABLE OF CONTENTS

LIST OF BOXES

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

In Indonesia, as in many developing countries, the government is struggling to improve the management of their dwindling forest resources. Despite government efforts, Indonesia still has large tracts of primary and secondary forest ecosystems that are under intense threat from both industry and local people. These areas make up approximately 40% of the Forest Zone under the responsibility of the Department of Forestry (Department of Forestry 2003). Deforestation is widespread, largely caused by illegal logging and the unauthorized use of fire.

Conflict and disagreement over who should control and manage the country's forests and forest lands underlie many of the tensions and the structure of incentives that lead stakeholders to operate in ways that are detrimental to sound forest management. The origins of this disagreement lie in large part in simplistic interpretations of the definition and location of both Indonesia's forests and the jurisdiction of the Department of Forestry. Different interpretations lead to radically different levels of control over forest resources by different institutions and actors.[1] Conflicts over control of land and natural resources due to uncertainty of ownership (state or community) will remain unless a serious effort is organized to rationalize the state Forest Zone through a clear action strategy.

The significance of the definition and classification of the "Forest Zone" is central to the public versus private legal debate over management priorities for these lands. Areas officially designated as part of the "Forest Zone" must be managed under a set of restrictions that can not only lead to the usurpation of local rights but also to administratively forcing some forest uses even if lands may be best suited for agriculture or agroforestry. For example, in Indonesia it is not uncommon for local people to be denied access to grasslands that could be used for food crops, since those lands have been classified as a Forest Zone to be used for timber planting only.

In Indonesia, significant areas that are considered to be "State Forest" actually have little or no forest. These lands were often classified as "forests" by default when they were not registered as agricultural land (Fay and Michon 2005). It was not uncommon that actual land use and the ancestral rights of communities living on those lands were intentionally ignored by colonial or post-colonial governments (Dove 1983; Lynch 1992).

This paper examines opportunities and challenges for addressing the tenure and land management questions that emerge from the skewed classification and management of the Forest Zone in Indonesia. Two basic natural resource rights and management priorities are proposed as integral to a Forest Zone rationalization process. The first prioritizes action towards the recognition or awarding of management or, when appropriate, ownership rights to local communities (collective or individual) over lands within the Forest Zone (*Kawasan Hutan*). An important conclusion of this analysis is that Indonesian law does not provide a basis for the Department of Forestry to own land within the State Forest Zone. Instead it provides only for government control and management of natural resources (Undang Undang Dasar 1945; Indonesian Constitution Section 33). On the other hand, the Basic Agrarian Law does allow for the state to own land but only when no other rights are present. Yet, even after sorting out the land rights question within the Forest Zone, during which some lands are determined to be genuinely owned by the

[1] This problem is also prevalent at the international level and has led to an ambitious effort by the Food and Agriculture Organization of the United Nations to harmonize definitions.

State, the jurisdiction of the Department of Forestry extends only to the forest resources on those lands (Fay and Sirait 2004).

The second resource right prioritizes the sustainable management of actual forests as defined in the 1999 Forestry Law. These are the remaining natural production forests and protected areas. These actions will likely lead to a more rational and legitimate forest estate. The results should be recognized by local people and should lead to opportunities for co-management of forest resources (not land) between local communities and government.

Apart from ethical considerations of officially recognizing rights in practice held by communities for generations, greater land tenure security has positive economic implications as it reduces uncertainty and generates incentives to improve forest resources management by increasing the likelihood that rural populations will be able to enjoy the fruits of their labor and time. Tenure security is thus a key strategic element in alleviating rural poverty (Deininger 2003; de Soto 2000).

The next section provides an overview of current understanding of forest cover in Indonesia. The following sections examine the legal framework for Forest Zone control and provide the fundamental arguments for tenure and forest management reforms in Indonesia, while the final two sections examine the main arguments – pro and contra – associated with such changes. We also recommend a framework of action that will contribute to the development of a new forest management paradigm in Indonesia.

OVERVIEW OF INDONESIA'S FOREST COVER AND FOREST MANAGEMENT

FOREST COVER

The most recent official data published by the Indonesian Ministry of Forestry are based on a Forest Zone determined by a so-called "harmonization" process that involved the Department of Forestry and local governments, combining the results of a "forest land use by consensus" exercise completed in 1994 (TGHK desk studies that resulted in Forest Zone maps based on remote sensing images) and provincial spatial developments plans (RTRWP) of 1999. The result of this harmonization process is a legally designated Forest Zone (*Kawasan Hutan*) of 120 million ha, corresponding to 62% of the total land surface of Indonesia. The responsibility for the management of these forests falls under the jurisdiction of the Department of Forestry. This Forest Zone does not correspond to actual forest cover. It represents a compromise between local governments and the Ministry of Forestry (MoF) regarding land areas where the MoF has jurisdiction over forest management or the creation of timber plantations. As will be discussed later, the MoF does not have jurisdiction over the allocation of land. Its authority ends with the management of the actual forests or areas where forests are to be planted. Land rights recognition or the leasing of state land is the jurisdiction of the Bureau of Lands.

The numbers below present indicators of land cover. Given the rapid development of remote sensing technologies and varying methods of land cover classification and analysis, it is difficult to compare recent measurement efforts. We have chosen two indicative tables in an effort to comment on the fundamental

question: How much and what types of forests exist in Indonesia? We then address another fundamental question: Who has the rights over these forests and the lands upon where they stand?

Most analyses of Indonesian forests and forestry begin with the statement that there are 100 million hectares of "some of the most magnificent, biologically-rich tropical forests in the world … ranking third behind Brazil and the Democratic Republic of the Congo" (FWI/GFW 2002; Millennium Ecosystem Assessment 2004; Brown and Durst 2003). In all these cases, the broad FAO forest definition is used. It begins with minimal low-density forests and works its way up to medium and high density forests. According to the FAO definition, for an area to be considered as forest, it must have at least 10% tree canopy cover over an area of more than 0.5 hectares. These trees can be either planted or not planted.[2]

More detailed analysis of remote sensing data over 100 million hectares reveals that these areas are not all magnificent tropical forests, but rather a mixture of high, medium and low-density planted and non-planted forests.[3] While there still are significant tracts of old growth tropical rainforests, these make up only a portion of Indonesia's forests. Further, in what continues to be one of the most important World Bank studies on forest cover in Indonesia, the author cautions that the data presented are based on rough estimates and that there has been no attempt to differentiate between planted and non-planted forests, including those grown by local people (Holmes 2002).

Table 1: Indonesian Land Cover Data, 2002 - Department of Forestry Data

Land Cover	Forest Zone								Non-forest Zone (APL)		Total	
	Permanent Forest Zone (1,000 ha)					HPK (1,000 ha)	Total (1,000 ha)	%	Total (1,000 ha)	%	Total (1,000 ha)	%
	HL	KSA-KPA	HP	HPT	Total							
A. Forest	20,903	12,858	20,510	17,769	72,040	10,882	**82,992**	**62**	**7,985**	**15**	**90,907**	**48**
B. Non-Forest	4,798	2,835	10,964	4,702	23,298	9,629	**32,927**	**25**	**41,466**	**76**	**74,393**	**40**
C. No data	4,359	3,678	3,859	3,259	15,054	2,224	**17,278**	**13**	**5,206**	**10**	**22,483**	**12**
TOTAL	**30,060**	**19,371**	**35,333**	**25,630**	**110,392**	**22,735**	**133,127**	**100**	**54,657**	**100**	**187,783**	**100**

- KSA-KPA = protected/conservation forest
- HL = watershed forest
- APL = area outside the Forest Zone
- HP = production forest
- HPT = limited production forest
- HPK = forest zone that can be converted

Table 1 presents the results of a recent remote sensing analysis that examined forest cover both inside and outside the Forest Zone. It is broken down by forest use classification and shows that some 33 million hectares of the total 120 million hectares of official Forest Zone in fact have no forest cover.[4] Therefore, according to Department of Forestry data, there are only approximately 87 million hectares of forest in Indonesia within the 120 million hectares of Forest Zone. This does not significantly contradict other forest cover studies that see just over 100 million hectares, because – as shown in the data below – there

[2] Although non-planted here is generally synonymous with "natural forest," we believe it provides a sharper sense of what these forests are.
[3] The Asia-Pacific Forestry Commission's *State of the Forest in Asia and the Pacific* mistakenly states that Indonesia is among those countries that have more than 100 million hectares of natural forest (p.7).
[4] Table 1 shows a total forest zone of 133 million hectares, not 120 million. This is because it includes three provinces not yet agreed upon under the "harmonization" process.

are nearly 8 million hectares of forest outside the Forest Zone and, further, there are certain areas in these studies that have no data due to cloud cover.

Table 2 shows the results of an analysis carried out by the University of Wageningen and Global Forest Watch/WRI, published in November 2004. This study also uses the Department of Forestry's forest classification system but makes calculated assumptions on what the types of land cover are within these categories. The important difference, when compared to the Ministry of Forestry data, is that this study identified just less than 27 million hectares of the Forest Zone as having no forest.[5] The difference of approximately 6 million hectares can be attributed to cloud cover differences and technical differences between Landsat and Spot specifications.

Table 2: Indonesian Land Cover Data, 2002 - University of Wageningen Data

Land cover (ha x 1,000)	HPK	HPT	KSA-KPA	Outside Forest Zone	HP	HL	Grand Totals
a. Bare/Burnt	1,140	480	360	2,660	900	510	6,100
b. Forest	11,500	19,940	8,130	5,510	14,540	14,980	74,620
c. Inundated land/Sawah	160	630	510	340	980	900	810
d. Mangrove/Swamp	6,500	1,450	2,020	2,140	5,470	830	18,450
e. Montane Forest	240	1,610	4,030	530	290	8,200	14,900
f. Non-forest	6,890	4,140	1,210	6,870	5,620	2,520	27,250
g. Permanent Bare	750	390	170	110	600	140	600
h. Young vegetation/alang	4,840	1,850	460	7,290	3,080	930	18,440
Grand Total	**31,400**	**29,600**	**16,400**	**25,500**	**31,100**	**28,200**	**161,100**

Source: Global Forest Watch/Sarvision University of Wageningen November 2004 (km²).[6]
Note: Differences due to rounding.

The main story that emerges has three important parts:

1. An area approximately ten times the size of Belgium has been classified as Forest Zone and yet there is no forest on these lands;
2. Approximately 8 million hectares of forests are not classified as part of the Forest Zone (some of this will certainly be old growth tropical forest);
3. There is no Indonesia-wide data available to determine whether the forests identified are planted or non-planted, information that is essential when addressing conflicts over management priorities and regulation. Despite the lack of data, there is agreement that areas of planted forests are important. There is also agreement that significant areas have been planted by local people, including millions of hectares of mixed rubber, cinnamon, resin and fruit agroforests (Michon and de Foresta 1990).

[5] This figure is based on a, c, f, g, and h as all being non-forests.
[6] Based on vegetation SPOT imagery 2002.

FOREST MANAGEMENT

The management of natural resources in modern day Indonesia is a mixed story. Across millions of hectares, local communities are planting fruit, resins, coffee and cacao forests and often integrate timber trees into these "agroforests" (de Foresta et al. 2000). These agroforests provide many of the same environmental services as natural forests with the main exception being their lower levels of biological diversity. Many local communities are also protecting remaining natural forests, sometimes in collaboration with local government forestry officials (Dala and Jaya 2002). However, overall, the situation of Indonesia's natural forest estate can only be described as one of crisis. Annual deforestation rates of over one million hectares persisted over the past ten years and the installed capacity of the wood-processing industry continues to exceed by far the sustainable annual level of extraction (Badan Planologi Kehutanan 2003). Recent analysis reveals that, according to the Department of Forestry, officially authorized log production was approximately 10 million cubic meters of wood in 2002, while the actual log equivalent of processed wood exceeded 50 million cubic meters that year, creating a fourfold variance in legal versus apparently illegal supply (Litski 2004).[7] At current rates, it is likely that Indonesia's natural production forests will be depleted by the end of the decade and large areas of conservation forests will be severely damaged or completely lost.

Conflict between local people – who claim land and resource rights over forest resources and forestry industries – and officials has been increasing consistently over the past 15 years (Fern 2001; Kusworo 2000). Uncertainty of tenure for both the community and industry contributed to land and forest degradation and, at times, violence. At the heart of many of these problems are the uncertain "rules of the game" as laid out by the Department of Forestry. The department claims jurisdiction over most of Indonesia, but is unable to manage such a large area and to provide the tenure and management security needed by both the local people and the forest industry.

The current paradigm chosen to manage the Forest Zone is intensive use for fuelling economic development.[8] Forest lands are categorized into timber production forests, areas set aside for conversion to other uses and conservation areas. In zones designated as production forests, the government allocates large timber concessions to private corporations. In areas set aside for conversion, "planned deforestation" is allowed to free forested lands for other uses.

In 1999, before the Forestry Law banned mining in protected forests, 150 mining companies held contracts overlapping with forests extending over 11 million hectares, including 8.7 million hectares of protected forests and 2.8 million hectares of conservation forests.[9] Many of these areas are home to rural communities who see their traditional rights threatened by these activities. Mining operations appear to be directly and indirectly responsible for considerable deforestation. Some estimate that the impact of mining may be equal to 10 percent of forest destruction in the country.[10] Forest resource utilization schemes regulate community actions to avoid interference with the operation of forest concessions.[11]

This approach to the administration of national forest wealth results in large economic outputs that have contributed significantly to the Indonesian economy. However, it also carries a number of negative

consequences. Timber concessions are awarded in non-transparent ways to a small number of powerful and well-connected individuals or corporations. Forests are also used as a vehicle for political patronage (Gautam et al. 2000; Sembiring 2002). All this continues to be instrumental in concentrating the growing economic and political power in a few hands. By 1998, 12 companies closely associated with the political and military elite controlled virtually all of Indonesia's 60 million hectares of forest concessions (McCarthy 2000).

Lack of transparency in decision-making facilitates the proliferation of illegal activities and corruption in the sector. Well-connected concessionaires routinely violate the terms of concessions with impunity. Rules and regulations are ignored with little fear of being punished by government. There is evidence that 84 percent of timber concessionaires violated various prescriptions of the law during the mid-1990s and systematic illegal logging took place even in some of Indonesia's most celebrated national parks – the Gunung Leuser, Tanjung Puting and the Kerinci Seblat – with no significant consequence to the perpetrators (Environmental Investigation Agency 1999; Environmental Investigation Agency and Telapak Indonesia 2001; Barber and Schweithelm 2000; World Bank 2001). During those years, some 70% of the forest harvest was done in illegal ways and deforestation wiped out at least 65 million hectares – 2.2 times the size of Italy (World Bank 2001; FAO 2001; FWI/GFW 2002). Thus, estimates show that deforestation during 1994-1997 was running at some 1.7 million hectares per year (FWI/GFW 2002). Once the valuable timber is extracted, the remaining land and forest resources are classified as degraded forests to be utilized for large plantations or other uses. This compounds the pressures for deforestation and forest degradation (Barber, Johnson and Hafild 1994).

Massive deforestation naturally results in biodiversity losses and in many places leads to soil erosion, siltation and damage of the forests' hydrological functions, thus worsening food security and compromising forests' future economic and environmental attributes. This management system also resulted in the proliferation of the large forest fires that in 1982-83 covered large areas in East Kalimantan and other parts of Indonesia. In 1997-1998, with the conditions created by El Niño, forest fires came back on a massive scale, this time affecting some 10 million hectares. Plantation owners or their agents set fire to forests to gain control over the lands. Where plantations had been established on customary lands, rural populations – who had never accepted the transfer of control over what they considered their resources – often set these plantations ablaze in retaliation. The unprecedented magnitude of forest fires contaminated the regional environment, causing extraordinary damage to soil, water, air, flora and fauna as well as exposing 20 million people across Southeast Asia to pollutants for months. The fires cost the citizens and businesses of Indonesia some $7.9 billion, while an additional $1.4 billion were lost due to increased carbon emissions (Barber and Schweithelm 2000; World Bank 2001; Holmes 2002).

[7] Based on Department of Forestry data. Data for the years after 2002 is patchy, if it exists at all, in many provinces due to decentralization of forest management and data collection (see Brown and Durst 2003).
[8] Law 5/1967 and Government Regulation 21/1970.
[9] As shown later in the text this ban was overturned by a Constitutional Court Decision in July 2005.
[10] Down to Earth, 2002. *No mining in the forests!* Down to Earth No. 53-54, August 2002.
[11] Government Regulation 21/1970.

THE LEGAL BASIS FOR FOREST ZONE CONTROL AND USE AND THE CREATION OF INDONESIA'S PERMANENT FOREST ESTATE

Indonesia's tropical forest wealth was enormous when the Dutch took control of the country. To administer this large expanse of natural forests, the colonial government adopted a legal system that laid the foundations of an approach to state forest administration and that later continued during independent Indonesia. That system vested exclusive control of forest resources in the government.[12]

Nevertheless, the Dutch colonial Forest Department tolerated customary *adat* rights in those areas that were not yet under the effective control of the government. In many places, particularly in the Outer Islands, customary forms of forest management and tenure continued to operate with little change (see **Box 1** for a discussion of the *adat* concept).

Box 1 – Adat

Adat refers to the cultural beliefs, rights and responsibilities, customary laws and courts, customary practice and self-governance institutions shared by an indigenous group prior to incorporation into a colonial or post-colonial state. *Adat* is location-specific and changes over time. *Adat* governs behavior between individuals as well as within and between families, communities and outsiders. It also governs the relationships between people and nature. It is interesting to note that *adat* leaders rarely use the term "indigenous" in Bahasa Indonesian as most Indonesians can claim to be indigenous. The distinction is that *adat* communities have maintained systems of local governance according to customary law as opposed to uniform and formal structures imposed by the central government.

When the Dutch acquired control of a certain area, they generally recognized *adat* until conflict arose with the colonial administration in which case the ruling authority laws prevailed. When Indonesia became independent from the Dutch, the new Indonesian state continued to recognize *adat* as long as it did not conflict with national interests. Article 18 of the Indonesian Constitution implicitly recognized *adat* rights and institutions, but made these rights subsidiary to other national objectives, as defined by the state.

In a similar way, the 1960 Agrarian Law (Undang-Undang Pokok Agraria) stated "indigenous law shall be recognized, providing this does not contradict national and state interest." Again, the latter part of the clause was frequently invoked to undermine *adat* law. Forestry Law 5 of 1967 (Undang-Undang Pokok Kehutanan) recognized *adat* rights but treated them as weak usufruct rights and subordinated them to the national interest. Further, the Law on Village Government No. 5 of 1979 dismantled *adat* institutions and the functions of indigenous leaders. The 1999 Forestry Law did not change the concept of customary community tenure rights but added confusion by stating that certain areas of the Forest zone can be recognized as "*Adat* Forests" but these forests must be classified as "State Forest." This is an apparent legal contradiction since "State Forests" areas are those forests where there are no rights attached to the lands and "*Adat* Forests" can only exist when *adat* rights are demonstrated to be in effect (Colchester et al. 2003).

Other laws and regulations consolidating the power of the state over forest lands were enacted during the post-independence period, deepening conflicts and intensifying the deterioration of *adat* institutions. Today, only a small proportion of Indonesia's lands are privately titled; most forest lands remain *adat*-owned, but not recognized by the state, which allocates plantation timber concessions on *adat* lands that are owned and managed by communities.

Sources: Alcorn (2000); Fay, Sirait and Kusworo (2000).

[12] As specified in the colonial forest law of 1863.

With Indonesia's independence, the 1945 Constitution, as well as various other pieces of legislation, made it clear that all natural resources were to be controlled (*dikuasai*) by the state. It was equally clear that the government, representing the state, was responsible for assuring that these resources would be managed to enhance the welfare of the Indonesian people.

TAP MPR IX/2001

After the constitution, the most important Act governing the management and distribution of benefit emanating from natural resources was the TAP MPR IX/2001. This act was signed into law by the People's Assembly (MPR) in 1999. It is generally viewed as the most far-reaching and explicit legal statement on the need for government to fully commit itself to natural resource management and agrarian reform. The Act requires the government to review, rationalize and harmonize all laws pertaining to land and other natural resources. This act has become the most powerful policy tool for the process of reforming the Indonesian Agrarian Law (Sunati 2003).

TAP MPR IX/2001 states that the conflicting laws relating to land and other resource tenure by the government sectors should be discontinued because of their negative effects on poverty alleviation and on natural resource conservation and management. These laws need to be revised, revoked or changed using a holistic approach. At the same time, TAP MPR IX/2001 mandates that conflict be solved through just and fair processes.

The Agrarian Law of 1960 and Forestry Law of 1999 are the two most important pieces of legislation that fall below a TAP MPR IX/2001 in the hierarchy of land and natural resource regulation. These laws regulate the management and distribution of natural resources. During a recent seminar in Yogyakarta, all government agencies dealing with land and natural resources (including forestry) met and agreed that a revised Agrarian Law should serve as the umbrella framework to deal with both land and natural resource tenure. Besides the Agrarian Law, several other laws were noted as needing revisions, including the draft Natural Resources Law and Spatial Law of 1992 (Proceedings of Legal Harmonization Meeting November 14, 2003).

This paper reviews the relationship between these laws and their responsiveness to TAP MPR IX/2001. We also present new legal analysis concerning the scope of the Forestry Law and the role of the government in regulating forest resources.

THE 1960 BASIC AGRARIAN LAW

A proper analysis of Indonesian forestry jurisdiction and natural resource management must begin with an examination of the Basic Agrarian Law of 1960 (BAL). As legal scholar Boedi Harsono wrote in 1997:

> From the land law perspectives on the land which has forest on it, the tenure systems are regulated from within the Land Law (*Hukum Tanah*, BAL). The Management right is given to MoF as mandated in the Forestry Law…In this situation, granting and recognizing rights on the land will be carried out by BPN (National Land Bureau) using the Land Law. MoF can only grant forest utilization rights and collecting rights on the forest.

The BAL covers the entire Indonesian landbase. It guides the government in recognizing and awarding 7 types of rights over land.[13] The most encompassing and secure, as viewed from the general western legal perspective, is the right of ownership (*hak milik*). The remaining 6 are forms of usufruct rights on lands that have been determined by the State to be under state control. Government Regulation 24, signed by President Suharto in 1997, provides the procedural framework for the recognition or awarding of the various classifications of land rights. Under this regulation, lands are divided into two: the first being Customary Lands (*tanah adat*), where rights can be recognized to have existed prior to the enactment of the BAL (*hak lama*), and the second being State Lands (*tanah negara*), which are open for distribution to private entities (*hak baru*). While not limited only to individuals, in practice "private entities" that have received land titles (*sertifikat*) have been nearly without exception individuals (Barber and Churchill 1987).

While the BAL and numerous subsequent natural resource management regulations give much attention to the recognition of customary rights (*Hak Ulayat),* there is in fact little de facto recognition and, thus far, little political will. One prominent exception are the procedures for the recognition of "private communal land title" for *adat* communities laid out in a 1999 Department of Agraria Ministerial decision that provides guidelines for the registration of *adat* lands (Ministerial Decision 5, 1999). This resulted, in large part, from the direct political pressure of AMAN, a national network of *adat* leaders, although no efforts have yet been made to test these procedures.

THE 1999 FORESTRY LAW

The 1999 Forestry Law was one of the first major pieces of legislation to come out of the post-Suharto, or *Reformasi,* period. It empowers the Department of Forestry to determine and manage Indonesia's *Kawasan Hutan* (Forest Zone). Nowhere does the law provide for the Department of Forestry ownership or control over the issuing of any of the land tenure rights created by the BAL. In fact, it is legally accurate to say that "forest lands" do not exist in Indonesia as a legal entity. The term forest lands (*Tanah Hutan*) is not a legal term in Bahasa Indonesia and is not even an expression that is used in the general discourse on forestry and forest management. The legal term used is Forest Zone (*Kawasan Hutan*), which is defined as "a certain area which is designated and/or stipulated by government to be retained as forest."[14] The law then divides the *Kawasan Hutan* into two distinct areas:

- State Forests (*Kawasan Hutan Negara),* where the government (Department of Forestry) has established that there are no private rights over the land; and
- Private Forests (*Hutan Hak*), where the land and land cover qualify as being forests but where there are private rights attached.

The following section provides more detail on each of these three terms, their origins and use.

[13] Article 16 BAL right of ownership (*hak milik*); right of exploitation/cultivation (*hak guna usaha*); right to use buildings (*hak guna bangunan*); right of use (*hak pakai*); right of lease (*hak sewa*); right to clear land *(hak membuka tanah*); and right to collect forest produce *(hak memungut-hasil-hutan).*

[14] "*Kawasan*" is used most often in development planning and is commonly defined as a region, area or sphere such as "*Kawasan Pariwisata*" for tourism or "*Kawasan Industri*" as an industrial area and "*Kawasan Hutan*" as forest zone. It has no legal relationship to land ownership.

Kawasan Hutan

In form, but not name, the *Kawasan Hutan* was first established during the Dutch colonial period when large areas of Java and smaller areas of Southern Sumatra were delineated and gazetted as Forest Estate. The first efforts to create a forest service began in the early part of the 19th century with the intention of controlling land, trees and forest labor. The legacy of this period and subsequent efforts to expand Forest Zone control is that today, nearly one quarter of Java is designated as Forest Zone and under the control of the parastatal forestry corporation Perum Perhutani (Peluso 1992).

Kawasan Hutan was first used as a legal term in the 1967 Basic Forestry Law and became the defining unit for Department of Forestry jurisdiction in the 1999 Forest Law. The process to determine the actual coverage can be traced to the Government Regulation on Forestry Planning signed by President Suharto in 1970 (PP33/1970). The government had, for some time, been awarding logging concessions outside of Java, even before the 1967 Forest Law had been enacted. These concessions were in natural forests and, at the time, there were no legal or management requirements to determine if concession areas overlapped with local land rights. Lands within and around these concessions were under the jurisdiction of the Department of Agraria and "unregistered," as most of Indonesia's lands continue to be today. A clearer definition of the Forest Zone was therefore needed.

PP33 gave authority to the Directorate of Forestry (then housed within the Ministry of Agriculture) to define the State Forest Zone. The regulations governing the gazettement of the Forest Zone were released in 1974 (Sk Menhut 85/74) and by the mid-1980s, nearly three fourths of the entire Indonesian land area was determined by the new Department of Forestry as *Kawasan Hutan.* The process was carried out by the Department as Forest Boundary Setting by Consensus (TGHK). It was created through desk studies and vegetation maps based on remote sensing imagery and supported by a complicated biophysical scoring process which employed no social criteria. Forest management categories were created and the initial results are shown in Table 3.

Table 3: Indonesian Forest Zone Based on TGHK, 1994

No.	Forest Function	Area (Ha)
1	Nature Reserve and Tourism Forest	19,152,885
2	Protection Forest	29,649,231
3	Limited Production Forest	29,570,656
4	Permanently Production Forest	33,401,655
5	Convertible Production Forest	30,000,000
	T O T A L	**141,774,427**

Source: Forestry Planning Agency (1999).

It soon became apparent that the level of consensus was not as high as the Department of Forestry had first claimed. Local governments often contested the boundaries and the constraints placed on their development options by the forest use categories. Between 1999 and 2001, compromises were reached through the provincial level spatial planning process (RTRWP) and Indonesia's current *Kawasan Hutan* is the result of the harmonization of TGHK and RTRWP, "*Paduserai.*"

Table 4: Indonesian Forest Zone Based on "Paduserasi", 1999

No.	Forest Function	Area (Ha)
1	Nature Reserve / Nature Conservation / Hunting Park (KSA/KPA/TB)	20,500,988
2	Protection Forest (HL)	33,519,600
3	Limited Production Forest (HPT)	23,057,449
4	Permanently Production Forest (HP)	35,197,011
5	Convertible Production Forest (HPK)	8,078,056
	T O T A L	**120,353,104**[15]

Source: Forestry Planning Agency (1999).

These 120 million hectares can be legally accepted as *Kawasan Hutan* based on the legal jurisdiction of the Department of Forestry to designate or indicate (*ditunjuk*) the Forest Zone.[16] However, this does not mean that local rights based on other legislation have not been violated in areas determined to be either state forests or private forests.[17] We must also note that the results of the planning process that led to 61% of Indonesia being classified as *Kawasan Hutan* are highly uneven in quality (Lynch 1999). Large areas such as grasslands and settlements that do not qualify under the forest definition in the 1999 Forest Law are included in the *Kawasan Hutan*. According to the Department of Forestry data, 33 million hectares of *Kawasan Hutan* have no trees at all (Forestry Planning Bureau 2002). On the other hand, some 8 million hectares of forests are not included as parts of the *Kawasan Hutan.*

State Forest Zones (Kawasan Hutan Negara)

As mentioned, the Forest Zone (*Kawasan Hutan)* can only be legally defined as *Kawasan Hutan Negara* or State Forest Zone when it is established that there are no other rights to the land upon which that Forest Zone sits (rights as presented in the Agrarian law of 1960). However, while the intention of the 1999 Forestry Law is clear, its interpretation by most members of the Department of Forestry is biased towards defining *Kawasan Hutan Negara* as <u>all</u> areas delineated by the TGHK/RTRWP that do not have land titles (*sertifikat*) issued by the BPN in accordance with the BAL. The elucidation of the 1999 Forestry Law states that, in principle, all areas under customary claims (*sebelumnya dikuasai oleh Hukum Adat*) fall within the State Forest Zone category. This is in contradiction to the definition of *Hutan Hak* in the 1999 Forestry Law and Government Regulation 24/1997 by which, with evidence, private rights can be claimed and recognized prior to the 1960 BAL.

In order to determine the status of local rights with the "Forest Zone," a detailed four-step process was created called the *Berita Acara Tata Batas* (BATB, Forest Delineation Process Document). This process is outlined in Figure 1. By signing the BATB, following procedures that involved the communities, the MoF and BPN – using the BAL principles and with communities signing an agreement that they have no

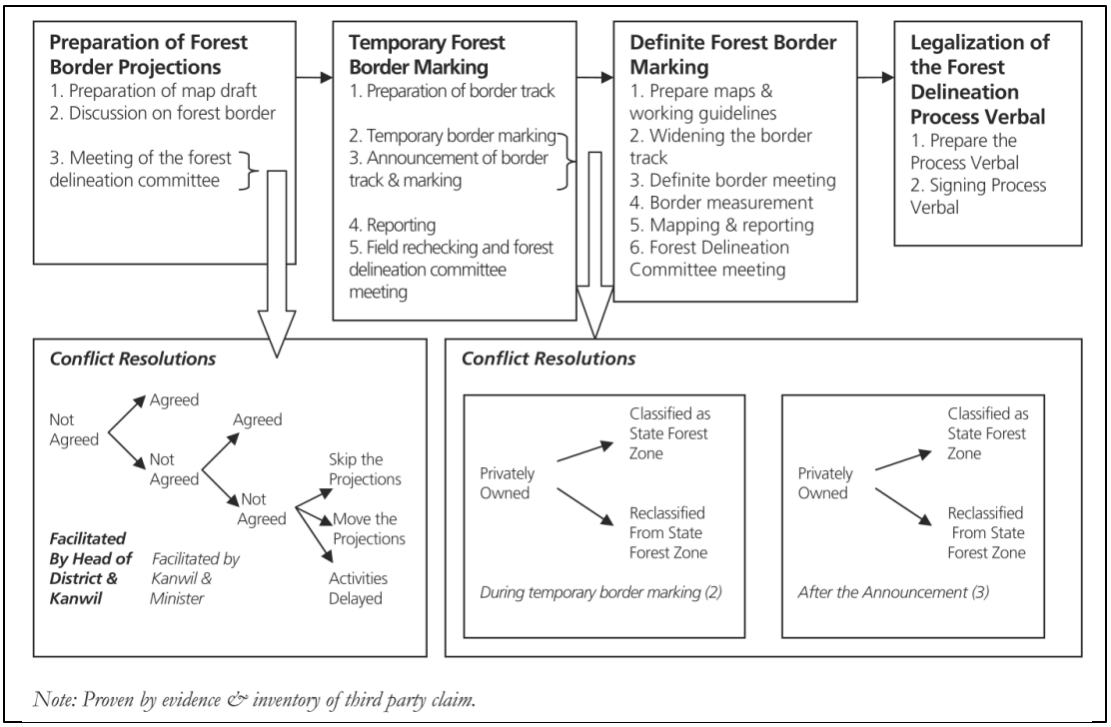
[15] As mentioned, this 120 million hectare figure still lacks three provinces that have yet to agree with the MoF on the Forest Zone within their provinces. The 133 million hectare figure used earlier in Table 1 includes the original numbers from the TGHK process for those provinces in the Department of Forestry 2002 data on total Forest Zone.

[16] Forestry Law 41, Chapter 1, paragraph 1, section 3.

[17] A strong legal argument can be made that procedures outlined in the Spatial Planning Law which require local participation in decision-making in spatial planning were ignored in the formulation of the *Kawasan Hutan.*

claims over the area and that the process was just and fair with a clear explanation of the legal consequences – the area can be legally and legitimately declared as *Kawasan Hutan Negara* or State Forest Zone. As of early 2005, the delineation process had covered only 12 million hectares, or just 10% of the 120 million hectare of "Forest Zone," leaving 108 million uncertain as to the nature of rights attached. This means that Indonesia's official "State Forest Zone" is currently only 12 million hectares, not 120 million as it is commonly perceived.

Figure 1: Forest Delineation Process



The remaining 108 million hectares of "Forest Zone" can be looked at as "Non-State Forest Zones" and are lands the National Land Bureau (BPN) considers as still being under the control of the State (*di kuasai oleh Negara*), but not as "State Land," as the government has yet to determine whether rights over these lands exist or not (as required in PP 24).[18] As a result, the State cannot award usufruct rights (even if it still "controls" the land) over these areas until it has determined whether or not private rights exist. Only then, for example, can the Department of Forestry issue extraction permits and, in the case of Private Forests (*Hutan Hak*), only to those who have been recognized to hold the rights over the land (Harsono 1977).[19]

[18] Article 1.3, PP 24/1997: State land or land controlled directly by the state is the land that has no rights attached.

Private Forest Zones (Kawasan Hutan Hak)

If the results of the full gazettement process, as laid out by the Department of Forestry, thus far make up 10% of the *Kawasan Hutan*, it is fair to assume that the remaining 90% falls under the category of *Kawasan Hutan Hak*, or private forests, until legally determined otherwise (*sebelum terbukti sebaliknya*).

It is also legally sound to view the lands under "Private Forests Areas and State Forest Zone" as under the jurisdiction of the BPN, the agency responsible for administering the various forms of land tenure under the BAL. In the case of the State Forest Zone those lands are, according to the BAL, State Land (*Tanah Negara*), since the BATB process determined that no local rights exist. In the case of Private Forest Zones, the State has, nearly without exception, not yet determined if local rights exist and these lands remain "unregistered" within areas the Department of Forestry has determined to be Forest Zone. "Unregistered lands" are controlled by the State (*dikuasai oleh Negara*) but are not technically State Lands.

Since legislators recognized that the full forest gazettement process would take a significant amount of time, Article 12 of the Forest Law allows the Department of Forestry to classify forests based on their production, conservation and protection functions. Yet no further actions could be taken before the land ownership status could be classified through land registration according to the requirements of PP 24/1997[20] or through the forest delineation process that culminates in the signing of the BATB and the formal State Forest gazettement by a Ministry of Forestry Decree. However, in practice and nearly without exception, industrial resource extraction and land use licenses have been awarded over lands where the state has yet to determine whether private rights exist.

Related Legislation

The legal framework is complicated by a number of related laws that indirectly have an impact on the way in which the different layers of government and communities manage forest resources and on the clarification of rights. For example, there are over 2,000 pieces of legislation, regulations and norms concerning land. Many more laws from other sectors indirectly have an impact on the management of forest resources.[21] In addition to laws, there are also a multitude of Ministerial Decisions, Ministerial Circulars and Government Regulations governing land use and tenure. New legislation related to the Indonesian decentralization process created further ambiguity on the rights to control forest resources. For example, a presidential decision states that land tenure matters are under the authority of the central government while the regional governance Law 22 of 1999 gives autonomy to districts to make decisions concerning land matters, including the settlement of conflicts (Sembiring 2002). Similarly, Government Regulation 25 on the Powers of the Central Government and the Provinces as Autonomous Regions issued in 2000 also conflicts with Law 22 because it sets up the provinces rather than districts as autonomous regions. Regulation 25 gives the Ministry of Forestry the main authority to stipulate boundaries, functions and zoning of forest lands. Yet, regional governments do not always respect this

---

This argument is strengthened by Prof. Maria Soemardjono's analysis that states: The Bureau of Lands is responsible for land titling. "State control" is understood to embrace the responsibility of government to establish fair "rules of the game" that all parties, including the government as a main actor, must follow (Soemardjono 2001).

[19] Concerning state land, these "permits" do not give authority for controlling the ownership over land.

[20] The requirements of land registration based on PP24/1997 are: 1) legal documentation or 2) recognition from neighbouring community or 3) physical evidence (Article 24).

[21] For a detailed account of forest legislation and related legislation in other sectors, see Sembiring 2002 and Thamrin 2002, respectively.

authority, partly because a Ministerial Decree does not have the legal status to modify local decisions (Effendi 2002). Further, the forestry law requires rural districts to implement sustainable forest management practices, while Law 22 requires them to use resources to generate as much revenue as possible to finance development programs, thus encouraging short-term gains and accelerated exploitation of forest resources.

There are regulatory inconsistencies between the Regional Autonomy Law and the Forest Law. The Regional Autonomy Law 22/1999 assigns authority over natural resources management decisions to regional governments. Government Regulation 34 on the Management, Exploitation and Use of Forest Areas provides operational guidance for the implementation of the Forest Law. This regulation gives authority for deciding on lucrative timber concessions contracts to the central government, a right that regional districts considered as being part of their authority. The regulation is therefore widely seen as an attempt to recentralize decision-making.

Another serious legal inconsistency, which eventually required a Constitutional Court decision, was related to the conflict between the Forestry Law, which explicitly banned open pit mining in forest areas, and the Government Regulation in Lieu of Law No. 1/2004 (*Peraturan Pemerintah Pengganti Undang-undang, Perpu*). Under Indonesia's Constitution, the President has the power to issue temporary emergency regulations, *Perpu*, which must then be approved by Parliament. Once passed, the *Perpu* has the same legal status as a law issued by Parliament. The *Perpu* went against the spirit of the Forest Law by allowing mining operations in protected areas that had been approved by the government before the issuance of the Forest Law.

The *Perpu* was followed by a Presidential Decree (*Keputusan Presiden, Keppres)* No. 41/2004 which allowed mining operations by 12 companies in 13 concessions in several protected forests in Indonesia. Environmental and other groups challenged these regulations on constitutional grounds, but on July 7, 2005 the Constitutional Court ruled that the companies should be allowed to mine in the forests (Associated Press 2005). The legal inconsistency and the associated legal challenges contributed to increased uncertainty in the forest sector.

In other cases, laws are simply not followed. The Spatial Planning Law of 1992[22] stipulated that the government, with the participation of local communities, should undertake spatial planning. In practice, this has rarely happened. The law's regulations provide for "references" and "considerations" to be taken into account during the development of public policy. Instead, consultants have prepared nearly all spatial plans. Another problem with this particular law and its regulations is that they do not include penalties in case of non-compliance. For example, if conversion to other uses takes place in an area where this is not permitted under the spatial plan, there is no way for authorities to undertake enforcement action because they cannot impose any sanctions on violators. Furthermore, the law appears to contradict other legal bodies on decentralization, particularly the Law on Regional Governance. Thus, the forestry law is very centralistic in its approach, while the decentralization law makes emphasis on bottom-up planning (Effendi 2002).

Contradictions and inconsistencies are a common and fertile ground for corruption and abuse with excessive regulation being a convenient way to charge bribes for "services" related to the compliance with many obscure rules which remain imperfectly known by communities or by other actors (Thamrin 2002).

[22] Law 24/92.

Discretionary interpretation of legal bodies results in opportunities for corruption and in an extreme lack of uniformity in the application of the law. As a consequence of legal confusion, most of the wood harvested is illegal and a significant proportion of the large international trade of forest products is also illegal (Scotland 2000). A report shows that the illegal logging business reaches a staggering $3.0 billion per year (Kartodiharjo 2002).

In short, the present land and natural resources laws and rules are (i) overlapping, (ii) contradictory and confusing, or (iii) simply non existent, or, when existent, (iv) rarely enforced. These features of the legal framework explain, of course, at least in part, the gap between what the law says and what really happens in practice.

Impact on Local Communities

Legal confusion and uncertainty have been devastating to the rural communities that for generations have been dependent on forests for their livelihoods, but have had no legal rights to those forest lands. In the past, extensive timber concessions were granted in areas occupied by rural communities that had no recourse to the law. Similarly, since the mid 1980s, the government's promotion of estate crops (tree crops and oil palm) "converted" forests without consideration of community rights. Conflicts between communities, government, timber concessionaires and plantation corporations multiplied and became endemic throughout Indonesia, as the state and a reduced circle of firms appropriated most of the resource rents while local populations were deprived of their customary access to forest resources (Barber and Churchill 1987). In the minds of rural populations who depended on forest resources for their livelihoods, the development and operations of timber concessions and plantations became associated with the abuse and deterioration of community condition. Mistrust in government and corporations grew in intensity (Arnold 2001). When, for lack of legal outlets, forest-dependent communities reacted violently, the military apparatus suppressed protests.[23] Human rights abuses were common (Gautam et al. 2000; Human Rights Watch 2003).

Tensions and conflicts also affected relations between displaced ethnic groups as they competed to secure access to lands legally owned by the government but de facto controlled by others. In addition to spontaneous migration, following the opening up of inaccessible parts of the Forest Zones, the government also sponsored transmigration programs to alleviate pressure on land in those zones with higher population densities, displacing poor communities from Java and, on a smaller scale from Bali, to the Outer Islands. Conflicts between rural groups and transmigrants multiplied, with their intensity increasing sharply during the last few years of the New Order, when poverty grew and there was a general breakdown of law and order (Kartodiharjo 1999; Gautam et al. 2000).

Thus, threats to community customary land tenure security came simultaneously from several potent forces: timber concessions, conversion of forests to estate crops, transmigration projects and occupation of lands associated with the opening of forests for timber exploitation or plantations by spontaneous migrants. None of these powerful developments respected customary community rights, but instead eroded community economic opportunity, well being and tenure security (Jarvie et al. 2003).

[23] In fact, the army has a very direct interest in the exploitation of forests. The army still derives only about 30 percent of its financial needs from the regular budget with the balance coming from its involvement in other revenue-generating activities, including forest exploitation (Colchester et al. 2003).

There were other undesirable developments derived from the uncertainties surrounding land tenure. For example, Griffen (2001) has called attention to the resulting negative impacts on the condition of women that in turn had repercussions on food security – as foods from the forests, customarily collected by women, were no longer obtainable – as well as on the availability of firewood and water.

Discriminatory policies and the faulty regulatory framework had an effect on large numbers of rural people. Although numbers are uncertain, it is estimated that the allocation of forests to concessionaires during this period ignored customary land rights of some 40-60 million people, most of them very poor (Fourie and Soewardi 2000).[24]

THE CASE FOR COMMUNITY FOREST ZONE CONTROL

Customary property rights are considered a high priority by the global community and are therefore protected by international declarations and law. The Universal Declaration of Human Rights (United Nations General Assembly 1948) establishes that nobody shall be deprived of his property even if this property is not documented in official papers. The International Labour Organization Convention 169 contains provisions on indigenous and tribal land rights which require respect for customary occupations and provides measures to recognize and protect those rights. It states that indigenous customary ownership over lands should be recognized (ILO 1989). The UN Committee on the Elimination of Racial Discrimination also recommends the recognition and protection of the rights of indigenous peoples to own, develop, control and use their communal lands, territories and resources (CERD 1997).[25]

In recent years, many countries have moved towards a greater recognition of community claims to forest land ownership. During the 1980s, some governments started to reform their forest sector to allow for the recognition of community customary rights to forest lands. Assessments in 24 forested countries that have approximately 93% of the world's remaining natural forests indicate that currently community reserves and ownership and other tenure arrangements reach some 22 percent of all forests in developing countries or about three times the area owned by private individuals and corporations. Much of the recognition of community rights to forests has taken place in the last decade and a half when community ownership or control of forest lands doubled (White and Martin 2002).

[24] The numbers of forest-dependent people are not known with certainty and estimates vary widely with some being as high as 100 million (Lynch 1995) depending on definitions and estimate procedures employed. A conservative estimate indicates that at least 20 million people fundamentally depend on forests for their livelihood (Sunderlin et al. 2000). Whatever the real numbers may be, Indonesia – being the world's fourth-largest country in terms of population numbers (210 million), with 124 million living in rural areas and a considerable portion of the forests – probably has a large number of forest-dependent people. The absence of statistics about forest-dependent peoples is in itself a strong indication of the level of marginalization of these populations.

[25] The Committee especially calls upon state parties to recognize and protect the rights of indigenous peoples to own, develop, control and use their communal lands, territories and resources. Likewise, where they have been deprived of the lands and territories they customarily owned, or otherwise inhabited or used without their free and informed consultation, steps should be taken to return those lands and territories. Only when this is for factual reasons not possible, the right to restitution should be substituted by the right to just, fair and prompt compensation. Such compensation should as far as possible take the form of lands and territories.

The reasons for recognizing customary rights to forest lands are many. Prominent among them is the increasing realization that good governance in the forest sector is linked to social justice, the protection of customary cultures and religions, community coherence and a democratic political environment. Policy reforms aimed at more secure community control of forests through legalized tenures are grounded on philosophical and governance concepts of social justice, empowerment and protection of cultural values.

While community land rights are central to social justice, the rationale for greater land security through legal ownership goes beyond ethical notions of social fairness, preservation of cultural values and reparation for past mistakes. Community management of forests is proving to be effective in better managing and conserving forest resources in various parts of the world. Further, it is a powerful mechanism for poverty alleviation and improving economic efficiency as well.

Worldwide, communities manage and conserve a minimum of 360 million hectares or as much as the areas in the formal protected area systems, but more effectively and without substantive government support. If a broader spectrum of agroforests, forest-agriculture mosaics and home gardens were included, the area managed by communities is possibly as much as 1 billion hectares or about one-third of the world's forests. Communities are stewards of large areas of natural habitat, managing landscape mosaics which include forests but also intensive non-forest land uses. Recently settled communities manage forest resources in frontier areas and long-settled communities also practice forest management in intensively managed landscapes (Molnar, Scherr and Khare 2004). These management systems occur in a wide diversity of countries, from Mexico to India, Guatemala, Sri Lanka, Tanzania and Brazil.

Ownership of land assets is a critical factor in the reduction of rural poverty. For most of the world's rural poor, forests are a primary resource for securing their livelihood. Community empowerment – with legal property rights being an important component – is one of the most effective tools to reduce poverty and improve the condition of rural populations:

> The assets that poor people possess… directly contribute to their well-being and have a potent effect on their prospects for escaping poverty…. Expanding the assets of poor people can strengthen their economic, political and social position and their control over their lives. Assets empower the poor. And assets help people manage risks (World Bank 2000).

> Secure forest ownership may be viewed as the most powerful stake a community may hold in forest future and the pivot upon which their involvement in forest future may be most profoundly and securely based (Alden Wily and Mbaya 2001).

Forests allow the poor to make productive use of their labor, thereby making them less reliant on wage employment and reducing vulnerability to economic shocks. Land is the most important asset impoverished rural communities can have. Much of the wealth of rural communities is held in the form of access to and control of land. Securing land property rights implies a transfer of wealth and therefore contributes to empowerment and poverty alleviation in rural areas (Deininger 2003). Moreover, land ownership also has a greater potential to generate economic efficiency gains because local ownership and control is associated with resource management systems that are tested, accessible and depend on local knowledge that is critical in sustaining productivity.

Securely owned land also enhances the incentives for investment. Greater land security by definition reduces uncertainty and therefore has the potential to alter investment of labor and time in favor of activities – such as certain forest activities – that may take many years to yield results. Property rights give communities the greatest leverage and capacity to negotiate with other actors, including government

(Lynch and Talbott 1995). The effect on the levels of uncertainty is more powerful in situations, now present in many parts of Indonesia, where competition for land is intense, when communities mistrust the government and when for whatever reason – political instability, ethnic conflict or a history of officially sponsored dispossession of customary rights – these feelings of mistrust may be particularly intense (Mukherjee, Hardjoino and Carriere 2002).[26]

When land is abundant in relation to population, there is less need for legal property rights. Communities will likely practice shifting cultivation, with temporary rights being assigned to individuals by the community. This situation changes when, as in many parts of Indonesia, population density increases and shifting cultivation is no longer adequate because fallow cycles are too short and fertility is lost. Land becomes more valuable and investments such as fertilizer and terracing become more attractive and necessary. Trees may have to be planted in combination with other crops. Unless land tenure is secure and those making these investments can reap their benefits, none of these investment activities is likely to happen. In Thailand, land reform had an important impact on economic output and on government revenues. In China, de-collectivization and greater land tenure security resulted in enormous productivity improvements. Similar results have been observed in Vietnam, Ghana and other countries (Do and Iyer 2003; Besley 1995). Instead, when there is pressure on forest land increases but legal ownership rights are absent or when there is general land insecurity, as is the case in Indonesia, conflict and resource dissipation are more likely to happen. The following was concluded in a worldwide review of experiences:

> Empirical evidence from across the world reveals the demand for greater security of tenure and illustrates that appropriate interventions to increase tenure security can have significant benefits in terms of equity, investment, credit supply and reduced expenditure of resources on defensive activities (Deininger 2003).

Research also demonstrates that, in many circumstances, greater land tenure security leads to improved forest management. Studies in Brazil show that land insecurity is a key factor in deforestation. Studies in Panama prove that effective property rights reduce deforestation. In Nepal and Vietnam, the quality of forest management increased when rights to state forests were transferred to communities and individuals (Deininger 2003). Evidently, the context in these various countries is varied and without a doubt there are many factors that determine forest management, with land tenure security being only one of them. However, it is not difficult to think of situations such as the ones mentioned above where the future net benefits from longer-term forest management based on secure land ownership may exceed those of immediate liquidation of the resource, thus creating the necessary conditions and incentives for making sustainable forest management possible.

Land ownership favors the development of local financial markets that rely on land as collateral. Furthermore, secure land ownership releases customary owners from the costs and efforts of trying to establish and enforce property rights. Titled land also tends to acquire a higher price. Studies in Indonesia show that in 1996, titled land commanded a 43-percent premium. Similar studies in the Philippines, Brazil and Thailand show differences that are even more significant (Deininger 2003). More valuable land also makes a more valuable collateral, easing access to credit markets.

---

[26] Some of these effects are contested or at least not fully supported by some analysts. While it is accepted that security of land tenure that comes with legal ownership is necessary for performing certain economic functions (such as obtaining credit), tree growing by local people is largely influenced by economic rather than by tenure considerations (Sheperd 1992). Even they, however, recognize that the situation changes when there is great uncertainty about the rights of populations to continue to utilize lands needed to grow trees over long-term periods.

The pattern of land ownership is also likely to affect the way in which public investments, such as transportation infrastructure, are allocated. Often these investments favor large and powerful concessionaires rather than the politically unnoticeable customary communities, thus introducing biases that foster inequality.

On the other side of the equation, failure to accord legal rights to the *de facto* possessors of land creates major, sometimes violent, social problems, land disputes and litigation when other actors such as timber concessionaires and other powerful actors obtain legal control of forests. As forests grow scarcer, these conflicts are bound to increase while community propensity to invest will decrease. Historically, the imposition of legal barriers to customary communities' land ownership has limited the scope of their economic progress.

Land ownership is also associated with other elements of a well functioning society (Hirschmann 1984). Greater social visibility, pride and identity, new possibilities to form alliances (for example with NGOs) and political empowerment are all developments that have been observed to accompany legal property rights (Shackleton et al. 2002). Land property rights contribute to strengthening social linkages and fairness in social relations (Swallow et al. 2000). Researchers argue that generating a sense of participation and belonging is a precondition for good and democratic governance at the local level (Deininger 2003). In contrast, ambiguity of tenure erodes community pride, self-esteem and power to negotiate resource use among themselves or with outsiders (Clay, Alcorn and Butler 2000).

However, perhaps the most powerful reason for a transition towards community ownership is the evidence that government and its public agencies have been poor stewards of the nation's forests in the past and that there is little reason to believe that this situation will change in the foreseeable future (Effendi 2002).

THE NATIONAL DEBATE ON FOREST ZONE POLICY REFORM IN INDONESIA

If the need for policy and legislative reforms leading to a greater land tenure security is widely accepted internationally, why have they not been meaningfully adopted and implemented in Indonesia? There are some concerns that explain the hesitation of the Department of Forestry to move ahead with a program for the institutionalization of legal forest land property rights for rural customary communities. The most important ones, expressed at a workshop involving government officials, NGOs, representatives of the private sector and international institutions in Jakarta in 2002, are discussed below.

THE POSSIBILITY OF LAND SUBDIVISION AND SALE

Detractors of State Forest Zone policy reform in favor of community ownership are keen to point out that if titles were given to individual farmers, they would likely divide and sell their land which would ultimately create a worse situation than the one before the reform. However, the policy reforms studied here focus on the recognition of *community* forest ownership. Community ownership would afford a

degree of protection against land sales and subdivision. Community ownership also offers other advantages in situations where there are economies of scale, where externalities can be more easily secured by group action than by individuals, such as when a community manages both the upper and lower parts of a watershed or when investment risks are high and pooling resources reduces exposure of the group. There are many situations in Indonesia where these conditions apply. Further, for a government with scarce organizational resources, it is administratively more efficient to deal with communities than with large numbers of individuals (Lynch and Talbott 1995).

But, it is argued, when ownership rights are granted to communities, they can legally sell their land if all members agree to do so. However, temporarily restricting subsequent sales could reduce this possibility. Also, differential treatment could be given to different types of forests, according to their main function, forest coverage, present land use and customary rights (Sembiring 2002). In addition, social assessments from the World Bank-supported Land Certification Program on Java found that, in fact, very few farmers, after securing titles, sold their land (World Bank 2002).

The Land Agency actually already accepts the registration of customary lands and treats them as communal and non-transferable rights (Fay, Sirait and Kusworo 2000).[27] Ministerial Decree No. 5 of 1999 of the Ministry of Agrarian Affairs opened opportunities for registering customary lands as communal but non-transferable property.

THE ARGUMENT THAT EXTERNALITIES JUSTIFY GOVERNMENT OWNERSHIP[28]

One of the main justifications for exclusive government control of forest resources is that these resources generate various "externalities," i.e. effects that may be desirable for society but not interesting to private owners as they are not compensated for producing externalities. This argument asserts that total production of these services would therefore be less than desirable because private individuals or communities would not be inclined to engage in activities that do not result in financial rewards. Biodiversity conservation, carbon sequestration and watershed protection are examples of these types of services. This line of reasoning maintains that only government can take the production of these "externalities" into account in management decisions.

Widespread evidence from around the world demonstrates that, indeed, private property holders, including those with community-based property rights, can and do produce some of these services as many of them, such as biodiversity conservation and carbon sequestration, are jointly produced with other outputs of forests the community wants (Ostrom 1990).[29] For example, much of the land not presently covered with natural forests appears to be suitable for agricultural production but some is too poor to sustain crops. However, this latter type of land can support tree crops or agroforestry systems and their development would likely increase the joint production of these external effects of forests (Holmes 2002). Thus, in the outer islands, tree crops are popular among small farmers and rural

[27] However, no clear procedures have been established to deal with community property.
[28] External effects are those impacts of private activities that are paid for or benefit the economy or environment but are not captured by or paid by private operators. A forest farmer that manages trees in an upper watershed produces services to downstream farmers but is not paid for these positive impacts. These impacts are *external* to the upper watershed forest farmer decision-making process because they do not generate impacts – costs or benefits – that would affect that farmer directly. This can be true for negative impacts as well.
[29] The argument that government ownership is required does not reflect the vast empirical evidence.

communities produce three quarters of Indonesia's rubber, 95 percent of its coffee and most of its coconut/copra production (Potter and Lee 1998). In fact, the outer islands contain some of the most extensive long-standing agroforestry systems in the world. They are managed so that they reproduce the externalities of natural environments to a great extent because they replicate some of the features and functions of natural forests (Holmes 2002). Cinnamon, rattan, rubber, resins, coffee, durian etc. are cultivated among timber species and agricultural crops. Indigenous peoples living in the interior of Borneo, the Dayak, have managed their forests in sustainable ways for thousands of years. A recent sample of communities in Kalimantan shows that forest cover in Dayak lands ranged from 50 to 99 percent, thus probably providing better environmental services than other forms of forest utilization based on timber concessions or large-scale plantations (quoted in Alcorn 2000).

Numerous other cases demonstrate, despite land insecurity, that communities have the capacity to manage forests in sustainable ways and in the process preserve many of the externalities of forests. Examples are the well-known case of the Krui community in West Lampung and the Meru Betiri community in East Java. The success of the damar agroforests in Sumatra, rubber agroforests in Sumatra and Kalimantan, rattan agroforests in Kalimantan etc. has also been documented in numerous studies. The agroforestry systems of the Krui communities conserve many of the biodiversity and soil values of natural forests and are much more environmentally-friendly than alternative uses (outside of pure preservation) such as plantations or clearance for agricultural crops (van Noordwijk et al. 1998).

Agroforests created and managed without support from government or international agencies cover some 4 million hectares in Sumatra. About 7 million people spread over 2.5 million hectares are estimated to live in Sumatra and Kalimantan around rubber-based agroforests alone (Fay, Sirait and Kusworo 2000). While not consciously pursuing the maximization of some of the externalities of forests, community agroforest managers are often supplying the joint production of these services on a long-term basis.

In many cases, communities have an economic incentive to implement agroforestry systems, many of which are environmentally benign, because these systems frequently appear to be financially more attractive (as well as environmentally sound, compared with alternative uses of forests). For example, research by IPB in West Lampung shows a substantial financial advantage of the complex agroforestry systems practiced by customary communities over rubber or oil palm monocultures (see Box 2).

The above cannot be construed to imply that community ownership or agroforestry systems will automatically lead to better environmental non-priced effects, as the relationship between land ownership, choice of production systems and associated externalities is indeed complex.[30] Local conditions and cultures vary and not all communities intrinsically respect the environment. Further, property rights do not provide all the necessary conditions for sustainable forest management and the continuing supply of desirable externalities. But more secure land tenure associated with land ownership rights tends to induce production systems such as agroforestry that are often, economically and environmentally, more sustainable than alternative uses of land and often this is linked to the joint production of positive externalities.

[30] For a global analysis of conditions that may determine agroforestry success, see Schroth et al. 2004.

In some cases, production may be incompatible with the persistence of some environmental external values. Thus, for example, the need for regulation of direct land use in critical areas such as upper watersheds will not likely disappear with legalized land community ownership.

Box 2 – Financial Analysis of Alternative Land Uses

Studies of financial incentives of community-managed agroforestry systems show that these have a substantial advantage over alternative land uses. IPB has studied the financial structure of "Owned Repong Damar," "KDTI Repong Damar" and "Oil Palm Monoculture" as three possible land use options in Krui, West Lampung. Results indicate little difference between the possibility of fully community-owned schemes and those that depend on long-term leases from the government. (However, the levels of uncertainty are substantially different, as shown in interviews with community leaders). On the other hand, customary agroforestry systems exemplify a substantial financial advantage over oil palm monoculture, due to the much greater environmental advantages of agroforestry systems.

Indicator	Owned Repong Damar	KDTI Repong Damar	Oil Palm Monoculture
Net Present Value (Rp)	86,096,981	86,018,556	5,198,866
Benefit / Cost Ratio	7.03	7.02	1.65

These results mirror other analyses carried out previously. For instance, a comparative study of returns to labor of alternative land uses shows that community-managed systems of land use are superior to rubber or oil palm monocultures:

Indicator	Community-based Forest Management	Rubber Monoculture	Oil Palm Monoculture
Returns to Labor (Rp per day)	10,000-12,000	3,683	5,797

Thus, these studies suggest that, under certain circumstances, there may be little financial incentive for communities to drastically change customary agroforestry systems of land use and in the process lose the various associated environmental services.

Source: Institut Pertanian Bogor (IPB) (2002).

But if communities in the above examples manage forests with a long-term perspective, at the same time producing a series of desirable externalities, under circumstances where they do not own the lands, why should land ownership make a difference? The answer relates again to the subject of uncertainty and to the limited power of communities to secure their future. The examples of sustainable production mentioned above and the associated production of at least some of the most important external benefits of forests do not imply that property rights are unimportant but rather that in selected cases, sound forest management takes place *despite* tenure insecurity. Secure land tenure would in turn introduce additional incentives to sustainable forest management and the continuing production of positive external effects.

Proponents of recognition of rights in Indonesia argue that a program could start on lands that have either been deforested or lands that are demonstrably rather well managed by communities as agroforestry systems. Deforested lands produce few externalities as compared with those produced under their former forest cover and lands presently managed as agroforests by communities already produce various products that provide positive external impacts.

CONCERN THAT COMMUNITY ELITES WOULD CAPTURE CONTROL AND BENEFITS

Opponents of community ownership of forests also argue that cases in various countries show that when government handed over lands to local communities, collusion among community leaders to appropriate benefits took place, leading to a concentration of power and assets in a few local hands. If representatives of communities have the power to redistribute land ownership or allocate rights to individual members, it is realistic to expect that some will join forces with politicians or other interests in exploiting opportunities for their own benefit. Even if the allocation process is relatively open, it is common for a few leaders to dominate community debates and manage to steer decisions in their direction (Thamrin 2002).

Furthermore, it is argued, certain communities may be ill-prepared to deal with external groups that may be interested in their resources. For example, the law mandates concessionaires and plantation corporations to work with local populations. But there is already some evidence that some concessionaires have used these collaborative schemes at the expense of communities. So, the danger of communities losing potential benefits to the hands of the more organized and more powerful is real (Wollenberg and Kartodihardjo 2002).

Government-inspired solutions to this problem may not be easy, particularly when there is a strong desire not to intervene in internal community affairs. Mechanisms for resolving internal conflicts can be set up or promoted but, in general, the community should decide in democratic ways how to handle these conflicts. Programs for increasing transparency of decisions and for informing communities of their rights and the consequences of decisions would help in promoting better community governance.

THE POTENTIAL FOR INCREASED CONFLICTS BETWEEN COMMUNITIES

Disagreements between communities about the boundaries of what they consider their land are not uncommon. Rights over forests sometimes overlap, some being claimed by groups that do not even live in the immediate area. Awarding clear and undisputable land property rights in these conditions may be difficult and may furthermore not solve some of the problems and conflicts associated with other customary rights and resources on that land.

Evidently, this is not a problem associated with the Forest Zone only, and experiences in rationalizing agricultural land tenure in Indonesia have proven than it can be handled by government agencies. Of course, a mechanism for processing and handling complaints and settling conflicts quickly must be in place. Likewise, there exists the possibility of creating agrarian courts as entities separate from general courts whose administrative jurisdiction could extend exclusively to the regency/township level with the capability to hold hearings and decide on matters concerning land tenure cases (Thamrin 2002). Again,

this requires considerable institutional organization on the part of government agencies but it is not beyond the capacity of government agencies, as demonstrated by the agricultural land titling programs.

COLLABORATIVE MANAGEMENT AS AN OPTION

One way to improve the management of forest resources, while at the same time enhancing the condition of local communities, is to promote various forms of partnerships between communities, the private sector and government.

In these discussions, collaborative forest management, CFM, is narrowly presented as schemes based on partnerships between government agencies and local communities. These arrangements vary enormously according to the elements that constitute that partnership, from simply providing information to communities on government programs, to various forms of consultation, to interactive participation (IIED 1994).[31] Furthermore, CFM schemes may or may not include land ownership rights, but in the context of the arguments normally presented by government officials, they do not. Generally, in the Indonesian debate, CFM designs are discussed as alternatives to the legal recognition of customary community ownership rights, not as complements. But this does not have to be the case. For example, in forests where local people do not claim ownership rights but desire access, CFM arrangements can work effectively and rights can be awarded contingent upon good land use and natural resource stewardship. Currently, the existing design of Indonesia's community forestry program (HKM) accommodates this well, although progress has been very slow in implementation.

In areas where local rights are claimed, forest use and management can be addressed through processes of that respect local claims and lead to negotiated agreements. These processes are effective in situations when local rights are claimed and generally clear, whether or not local people have received formal or administrative recognition.

CFM has the advantage of having the government as a partner, which can by itself increase land tenure security as it implies government recognition of the community as an entity enjoying a number of rights included in the stewardship agreement. In addition, CFM arrangements have the potential for introducing systems of checks and balances as interest groups manoeuvre to achieve accommodation (Carter 1999; see Box 3).

[31] They are variously termed Community Involvement in Forest Management (CIFM), Community-Based Forest Management (CBFM), Joint Forest Management (JFM, referring more specifically to the case of India) and Participatory Forest Management (PFM). More recently, there has been a tendency to broaden the scope of these forms of collaboration to include other stakeholders, mainly from the private sector. The term Collaborative Forest Management, CFM, has been coined for this type of partnership.

Box 3 – Potential Advantages of CFM

Collaborative arrangements have the potential to improve the quality of forest management by:

- Potentially increasing land tenure security;
- Increasing commitment of various stakeholders through joint involvement in problem-solving;
- Improving the quality of decisions by a more intense analysis of options and by offering opportunities for implementing win-win actions as well as for resolving conflicts;
- Expanding the chances to reduce failure in all those cases in which agreement is elusive by fostering discussion and exchange of improved knowledge about values and perceptions of stakeholders;
- Facilitating the flow of information and the dissemination of knowledge and the utilization of local knowledge; at the same time, tackling local problems and designing solutions is facilitated by more comprehensive information and management because stakeholders' experiences and capabilities would complement each other;
- Intensifying acceptability, flexibility and persistence of joint decisions; all joint decisions are more likely to be deemed legitimate in the eyes of the community than unilaterally imposed ones; also partners would be more likely to sustain the general direction of forest management if there were a shared agreement of actions to undertake; each partner would be less inclined to introduce drastic changes to decisions that have already been agreed on by the group; these factors increase in importance in decisions that are complex and uncertain and when effects materialize in the long run, all characteristics are present in many forest management decisions;
- Fostering the proliferation of democratic institutions, often an objective that is desirable per se;
- Securing greater transparency in decision-making.

There are persuasive theoretical reasons to support CFM. However, CFM experiments in various parts of the world suggest that these potential advantages are difficult to translate into actual benefits for communities. The few successful projects that exist have required substantial, sustained and costly external support.

However, the most serious problems in implementing CFM schemes relate to the generalized tendency of government institutions to keep control of key decisions (see, for example, Scott 2001). CFM schemes focus on product and *benefit sharing*, with one powerful party -- the government – overwhelmingly dominating the decision-making environment and with a strong tendency to obtain as great a share of benefits as possible. Indeed, CFM normally entails public ownership of land and forests, with the state retaining final authority and granting some "privileges" to local communities to use forest resources in exchange for following certain rules of behavior. Communities become "beneficiaries" in government-sponsored designs in which the decisions that matter are in the hands of government agencies.

Authentic partnership must be distinguished from patronage. Experiences elsewhere show that local communities are rarely prepared to run businesses or work as equals with government institutions and thus frequently become the junior partners in CFM schemes (Clay, Alcorn and Butler 2000).

Furthermore, CFM differs from programs to grant legal ownership to communities in the very important aspect of empowerment. Indeed, land ownership reforms center on *power realignment* and on the concept that strategies adopted by the community to manage resources should be based not on bureaucratic decisions from above but on the customary rights and stewardship of the resource, which in turn is an integral part of the local culture and environment. Strategies for *benefit sharing* are conceptually and

practically different from those of *empowerment* of communities. Not surprisingly, various studies in several countries with benefit-sharing approaches as compared with power-sharing methods show that the latter are more effective in getting local people interested in forest management (Alden Wily and Mbaya 2001).

As a rule, a bureaucracy making key decisions affecting key communities is more than likely to lead to poor economic results for the joint enterprise. For example, the experience in Indonesia with parastatal (*Inhutani*) corporations is not encouraging. Such corporations are notorious for their sustained losses. Entering communities and parastatals into CFM would likely not produce any benefits to share. Furthermore, and reflecting entrenched attitudes, public corporations in Indonesia are known for their reluctance to allow any form of meaningful community participation in decision-making (Bennett 2000).

Evidence of the few cases where a variety of joint management has been employed is also illustrative. Occurrences in Indonesia involving co-management, for example in Kerinci-Seblat National Park, have led to poor results. In that case, communities did not feel compelled to protect the park and illegal activities became rampant. One of the key factors identified by analysts assessing this experience was the need to grant communities greater land security (GOI 2001).

Finally, CFM entails substantial costs in carrying out negotiations, determining roles, establishing sharing agreements, providing proper monitoring and evaluation of activities and so on. CFM is slow and costly to set up and therefore these schemes are often implemented with external assistance (Carter and Gronow 2005). This does not imply that the costs of land ownership strategies are negligible. In fact, its administrative demands can be substantial, but they are likely to be lower than those of CFM, which may require a more intimate involvement with government.

Nevertheless, some experiments with a lighter government involvement are taking place in Indonesia. For example, some 16,000 Dayak people living inside or in close proximity to the 1.4 million hectares of Kayan Mentarang National Park in the interior of East Kalimantan, Indonesian Borneo, have obtained legal representation in the park's policy board, which also includes representatives of the national, provincial and district governments. According to a Decree of the Ministry of Forestry in 2002, the park is to be managed through collaborative management. It is still too early to judge whether this initiative will be successful in the long term (Eghenter, Labo and Farhan 2003).

LONG-TERM LEASES

An alternative, proposed by some in Indonesia, is the establishment of long-term leases of the State Forest Zone, with provisions for automatic renewal as long as conditions are met. Leases clearly have fewer advantages than full ownership, but in some cases may be the only short-term option that is politically feasible. They can also be a first step which eventually leads to full recognition of community property rights. However, they require trust on the part of the communities that the government will not cancel contracts in absence of a clear and indisputable community violation to well-established rules. This is a main problem of this type of arrangement. Interviews carried out in the context of this study reveal that an important reason for communities to aspire to full ownership rights to their customary lands is the perception that changes of government may at the stroke of a pen eliminate any sense of land tenure security. This type of arrangement would also imply formal abdication of rights to forest lands which some communities consider as inalienable. As expressed by Lynch and Talbott (1995):

> Community forest leases and other rights based on privileges stem from the assumption that government owns the resources and the other party had no legal right to use them.

Despite these limitations, leases are the closest alternative to full ownership, particularly if they are long-term leases, that is they last for periods long enough to include at least the possibility of capturing the results of long-term efforts and investments by the community. Of course, this will occur only if the rules of the game are clear and adequate arrangements exist to solve disputes in an objective, transparent and fair manner, eliminating arbitrary decisions.

Some steps towards formal agreement with communities were taken in 1998, when the Minister of Forests and Estate Crops assigned management rights – not ownership – of over 29,000 hectares of State Forest Zone to the Krui communities in Lampung, Sumatra. A new classification of State Forest Zone was needed for this agreement: "Zone with Specific Purpose" (*Kawasan Dengan Tujuan Istimewa).*[32] This was the first time that a community management scheme was officially recognized in a Forest Zone. However, as mentioned, this does not constitute recognition of land ownership as control remains in the hands of the state. Further, while the agreement is valid for as long as the community exists, evaluations by the government would be carried out every five years. The government can revoke the agreement if assessments show that activities go against the law or against the "public interest." This reintroduces the feared element of tenure uncertainty, which could otherwise be diminished with legal ownership rights. Nevertheless, and on the basis of the positive Krui experience, work was carried out by NGOs to expand this model, with improvements, to other communities of proven ability to manage forests, but no further Zones with Specific Purposes have since been created.

THE DIFFICULTY OF MANAGING THE RECOGNITION PROCESS

Why would communities accept exclusion from ownership of the best natural forests once the legalization process gets under way on degraded lands? Would it not be unfair to restrict rural communities to deforested or poorly endowed areas, while other actors such as logging corporations that already wield substantial economic power are granted access to the best of the nation's forests? Moreover, if other outlets to reduce pressure, such as attractive alternative job and livelihood opportunities, do not materialize, it may be difficult for the government to control invasions of better quality forests by communities demanding legal ownership and control of natural forests.

It is not possible to foresee the direction and intensity of rural demands, since they will be influenced by economic and political developments that are difficult to predict. In some cases, community property rights to areas not covered by natural forests could reduce future pressures for further advances on natural forests. What is reasonably clear is that rural communities and several sectors of the civil society, even certain government sectors, will continue to increase their demands for change. Ideally, it would be advisable for the government to make efforts to effectively manage the expected and, in many cases, the existing transitions. Land occupation is already taking place in many areas and it is fair to assume that the government will continue to be unable to stop it. The question is not whether occupation will continue or not, but rather whether such penetration will take place in an illegal and perhaps violent and chaotic manner, or whether instead, the government will be willing and able to steer it in an orderly way. The

[32] MFEC Decree 47/1998.

latter would certainly require a substantially enhanced capacity to enforce the law, particularly in areas that should be excluded from the process, such as national parks and other environmentally critical areas. Unfortunately, the record of law enforcement in the forest sector of Indonesia is not strong and, as we will see further on, the decentralization process has introduced new uncertainties.

An advantage of creating legal forest land ownership rights for local communities is that the Ministry of Forestry could dedicate more time and energy to ensuring that the rules of forest management are followed both in areas not affected by the process as well as in reformed areas. The past incapacity of the government to manage national parks and other protected areas and to control unauthorized logging can in part be attributed to its lack of focus and to its attempt to manage, as a single entity, the huge national forest estate.

However, if the process happens simultaneously on a large scale, the fact remains that securing legal land ownership rights for local communities would need a vastly expanded capacity of the state to enforce the law in natural State Forest Zone so as to avoid further land invasions. For this reason it would be important to devise and follow a systematic and measured approach.

To summarize, some of the presumed potential disadvantages of recognizing Forest Zone ownership rights by the Indonesian government as they emerge from the national debate merit consideration but others are less relevant. None is serious enough to preserve present discriminatory practices that ignore customary community land ownership rights.

THE OPERATIONAL CONTEXT: CHALLENGES AND OPPORTUNITIES

The discussion thus far has focused on the technical and legal issues associated with the recognition of legal community ownership rights. Two other options have been considered: collaborative forest management (CFM) arrangements and long-term leasing. In addition, the implementation of a policy that would recognize community ownership rights has been presented together with its clear legal basis. Such policy reform will likely occur within a political and administrative environment that may create both opportunities for and obstacles to success. The key challenge is to avoid the risks of operational weaknesses that, in turn, result in a possible dissipation of the economic and environmental benefits of this transition. The following section deals with issues related to the operational aspects of recognizing customary ownership rights.

The most important factors influencing the possibility of success of this undertaking are those developments resulting from the recent Indonesian drive for decentralization. For this reason this theme is discussed first.

DEALING WITH DECENTRALIZATION: IMPLICATIONS FOR STRENGTHENING FOREST TENURE

The Indonesian decentralization effort has created both opportunities and challenges for the legalization of community property rights. Greater autonomy to regions and greater control by local administration of

forest resources has, in many cases, resulted in a greater voice for local communities and their increased power in shaping local decisions. However, the decentralization process has in some cases also been the cause of threats to community rights.

In 1999, the government passed two laws that were implemented starting in January 2001 and that called for a process of decentralization to the districts and provinces. The Law on Regional Governance (Law 22) specified the political and administrative responsibilities of each level of government while the Law on Fiscal Balance (Law 25) established a new system of sharing financial resources between the different levels of government. Districts, considered closer to the people and therefore more apt at promoting democratization, were assigned primary responsibility for administrative and regulatory functions.[33]

Concerning public finances, a large proportion (70 percent) of the revenues originating in forest exploitation could be retained by the sub-national governments, and the national government was also to allocate 25 percent of its revenues to districts (90 percent) and provinces (10 percent). Local government was instructed to actively pursue options to develop their own sources of financing.

In general, decentralization has offered a number of opportunities for local communities to acquire a greater say in the shaping of policies governing the management of forests. Decentralization has also led to greater accountability at the local level, increased equity and, in some cases, more sustainable use of forest resources. Decentralized governments are closer to the people and therefore more responsive to local demands than centralized government schemes. However, the decentralization process was far-reaching and many local governments were unprepared for such large-scale reorganization. Nearly 2 million civil servants were transferred from the central bureaucracy to local governments. Decentralization took place in a single sweeping action. Indonesia transformed itself, almost overnight, from one of the most centralized states in the world to one of the most decentralized. Because of the political instability that dominated the period immediately after 1999 and the struggles between the executive and legislative branches of government, there was poor preparation for the implementation of the new decentralization framework. While laws were enacted, corresponding regulations were not, leaving much to interpretation and discretionary judgments by local and often inadequately prepared public officials. Various pieces of legislation, including the new decentralization laws, were contradictory or inconsistent with other legislation.

Currently, disputes between actors at different levels of government are common. In the forestry sector, for example, national, provincial and district offices issue overlapping and conflicting timber licenses. For example, districts issue licenses on lands already granted to concessionaires by the Ministry of Forestry. In practical terms, power over forest decisions has concentrated on the districts. But in an environment of relative legislative uncertainty, each level of government vigorously asserts its authority to make a number of decisions and simultaneously denies the authority of other levels of government to do so. In the middle of all this, the role and rights of local communities are under the risk of losing to more powerful interests.

The lines of authority recently became clearer when the President issued a special order to local authorities to repeal regulations that contradict the national forestry law.

[33] The idea of decentralizing greater powers to the provinces proved to be politically difficult as some sectors of government opposed it on grounds that greater provincial autonomy would increase centrifugal political forces. Other sectors of government also objected to this idea because provinces were identified with the structures of central government prevailing during the New Order. Hence, most power went to the districts.

How do communities hold up in this quickly changing political environment? Although community rights have yet to be widely accepted in the official sector, *Reformasi* created greater support for the recognition of community rights to land in other sectors. The weaker hold of the central government emboldened some to stake forceful claims to customary lands. The problem is that other actors have overlapping claims on the same lands and there are no institutions that can deal satisfactorily with the resolution of conflicts. When community claims are not recognized, many communities resort to violence. Community violence peaked in 1999-2000 (Jarvie et al. 2003).

In certain cases, the force of community demands has persuaded other actors, concessionaires and local governments, to include them in their decisions and resource exploitation schemes, but communities generally derive few benefits from these arrangements because they are not prepared for this type of transactions and do not know how to manage contracts with companies or government officials. Given the lack of community capacity to enforce agreements, promises often go unfulfilled.

In an atmosphere of rapid change, those actors that have better access to market information and good connections with potential buyers and government officials have a great advantage. Communities do not enjoy these advantages and therefore profit less than they could from these deals. Instead, decentralization has tended to favor local elites, local politicians and the security apparatus, all of which join forces to exploit forest resources as fast as possible (Down to Earth 2002). Many communities witnessing the rapid depletion of resources in their areas have few alternatives but to join the race and get what they can while these resources last.

In sum, the ongoing process of decentralization has a number of implications for any forest tenure reform, including:

i) The lack of clear rules of the game and the incapacity of the central government to monitor and enforce the law have translated into local government initiatives that go well beyond the responsibilities assigned by the laws and regulations issued by the central government and result in the loss of national coherence in the sector's policies and public administration.

ii) The decentralization process has created a wave of expectations and increased the pressure for changes in the districts to the point that the central government has largely lost control of the process.

iii) These uncertainties have increased the struggle between different levels of government with a *de facto* informal process of decentralization propelled by the local governments quickly taking over the formal process advocated by the central government.

iv) At the district level, the realization of the opportunity to establish claims over resources created numerous strong demands for resolution of conflicts that district governments were ill-prepared to face.

v) The central government often assigned tasks to the district and provincial levels but did not provide them with the necessary resources for discharging these new responsibilities. In these circumstances, the danger of falling into chaotic situations has increased, with competing stakeholders racing to secure their "rights" – legitimate or not – particularly over the most valuable forest resources.

vi) District governments have the authority to issue licenses for the small-scale exploitation of forest resources and therefore have an incentive to accelerate their exploitation to raise revenues.

vii) Communities perceive some immediate benefits from accelerated exploitation, but at the cost of degradation of their forest resource base. They are also in an inferior position to negotiate, and therefore their gains, when present, are less than what they could be and are often appropriated by community elites.

The institutional situation described above raises the difficulty of installing a successful program to legally recognize customary community rights to the Forest Zone. To be successful, the government would need to devise an implementation strategy that would ensure a certain degree of law and order at the risk of the process derailing and contributing to the uncertainty and chaos now dominating public administration in rural areas.

THE DEVELOPMENT OF A NATIONAL VISION AND STRATEGY TO REFORM THE FOREST ESTATE

Many of the policy, legislative and institutional failures described above have their root in the lack of a comprehensive strategy for the management of the sector. A National Forestry Program is taking shape and needs to be further developed and implemented as a matter of urgency. After years of discussion, still lacking is a policy that would clarify what areas should remain in the hands of the state and what areas now classified as forests areas are in fact void of forests or already under agriculture and need not be part of the forest domain. There is no apparent reason why the Ministry of Forests should continue to control lands that are not forested. The government needs to reclassify forests and excise from its control all those that are actually under other uses or do not appear to have a clear justification to remain under the classification of Forest Zone. The Ministry of Forestry itself recognized this need by admitting that "systematic mistakes have occurred in the designation of Forest Zone status with the result that social conflict has arisen and is still ongoing."[34]

The Department of Forestry did prepare a Strategic Plan (RENSTRA)[35] for 2001-2005, but this plan has yet to be applied. The plan mandated districts and provinces to adhere to the national plan in preparing their local, district and provincial plans. But since local executives must respond to local legislative bodies for their own plans, the Strategic Plan is not being considered. Indeed, the Department of Forestry no longer considers this plan in organizing future activities (Effendi 2002).

Further, the current National Development Program (PROPENAS)[36] drawn up by the national planning office has very ambitious objectives that the districts find difficult to fulfill. These objectives often differ from those of the local governments. Many rural districts' local development programs are inconsistent with the national plan. While the national plan encourages long-term sustainable development, the districts' plans give greater importance to short-term revenue objectives. The institutional disconnect between these different levels of government is glaring, adding substantially to the disorder and uncertainty surrounding the utilization of forest resources and the place and role of the different actors, including communities, in the overall effort.

This strategic void contributes to the multiplication of inconsistent and conflicting laws and rules as well as to the large discrepancy between said laws and what actually happens. This is in part the cause of the

[34] Minister of Forestry Decree 20/2001, quoted in Effendi 2002.
[35] Rencana Stratejik. Strategic Plan 2001-2005.
[36] Program Pembangunan Nasional. National Development Plan 2003.

institutional tendency towards secrecy and of friction between agencies, such as the tug of war between central and local governments.

THE DEVELOPMENT OF A POLITICAL CONSTITUENCY FOR REFORM

Since government has traditionally excluded communities from participating in decisions related to forests, legal recognition of land rights would require a radical change in government staff attitudes.

There is continued resistance in various parts of the government to implement such policy reform. This resistance is shared by some powerful groups that would see their interests threatened if the concept were widely accepted. Experience demonstrates that even in the presence of laws that favor community rights, administrative obstacles engineered by those that would prefer the status quo can act as powerful deterrents to the implementation of reforms (Carter and Gronow 2005; Bennett 2000).

However, there are also other sectors of government that are becoming convinced that extensions of the titling programs already carried out in agricultural lands should be expanded to cover certain areas that are now erroneously classified as Forest Zones. The continuing debate on the subject, favored by international organizations, research institutions and non-governmental organizations, offers increasing opportunities to examine related issues in an objective manner and to create greater accord and political support toward the proper course of action.

LIMITED INSTITUTIONAL CAPACITY TO IMPLEMENT TENURE REFORMS

While some of the origins of the disparity between the *de jure* and *de facto* conditions can be explained by the legal failures described above, others arise from purely institutional weaknesses afflicting government agencies. The efficient design, approval and implementation of a scheme for granting legal land ownership rights would require certain actions by a number of key government agencies – including the Ministry of Forests, regional and local governments, the land agency (BPN), the legislative, law enforcement agencies and the judiciary – to take place in a coordinated fashion. It would also require certainty that rights will be enforced and will not be taken away unilaterally and unfairly by the government.

In the wake of decentralization, many government institutional roles need to be redefined and overhauled. As new tasks are developed, new administrative procedures must be created, responsibilities and authority are likely to shift, and new patterns of public resource allocations will emerge. Further, an institutional effort would be needed to create appropriate incentives for communities to manage their lands in an economically and ecologically sound manner. Some communities may be organized to the point that little support may be needed from government, but in many other cases – such as when there are competing claims – there will be additional needs for government services, such as arbitration and legal conflict resolution. Overall, administrative demands are likely to be high if a minimum degree of coherence and efficiency is to be achieved.

LIMITED KNOWLEDGE ABOUT FOREST RESOURCES, COMMUNITY USE AND RIGHTS

It is self evident that any program aimed at recognizing customary Forest Zone ownership rights needs to identify these lands, which groups are occupying them, what their rights might be and where there exist conflicting claims.

The Government has carried out various assessments of forest resources, but unfortunately up-to-date and reliable information is simply not available to the public. One thing is clear: resource assessments in the past have treated forests as devoid of people and therefore the crucial link between the resource base and its utilization by human beings is unclear. These various assessments need to be complemented by information about the present uses of deforested lands, the area under agroforestry or other uses and how much land could be legally dedicated to communities.

TOWARDS A FRAMEWORK FOR ACTION

In view of the economic, environmental and social reasons related to land tenure security discussed in this text and the experience not only in Indonesia but also in the rest of the world, there are powerful arguments for the government to seriously develop and implement a program for the recognition of rights to forests for local communities in Indonesia. Failure to establish forest ownership and management rights is likely to lead to further resource dissipation and restricted benefits for the poor.

Policies and programs aimed at legally recognizing customary community land and resource rights, although not free from risks, offer many advantages in terms of economic efficiency, poverty reduction and environmental impacts. Properly executed, these would also redress past dispossession by the state of an asset that is essential for the livelihoods and economic opportunity of rural people and would enhance economic incentives to investments by local people.

The greatest risk is to allow present circumstances to continue to dominate the forest sector in the future. Current incentives point towards accelerated rates of depletion, including those impacting customary lands, which is bound to create greater social, political, economic and environmental problems in the future. Business as usual has the great risk of having further negative effects on the fight against sustainable forest management, rural poverty and increased levels of income disparity.

The analysis above suggests a series of actions that, in sum, would strengthen the tenure security of Indonesia's forest estate. Haphazard, erratic or poorly supported actions would introduce an element of uncertainty in an already chaotic public administration and would likely lead to further disorder, dissipation of resources and a continuing deterioration of the condition of rural populations, the environment and the forest economy. Despite this risk, there are opportunities for organizing highly focused actions that would contribute to creating a path towards the more ambitious objective of securing legal property rights for customary forest-dependent communities.

It is self evident that progress to reforming Forest Zone tenure in Indonesia will not happen unless there is a decisive political willingness to do so, even if initially a program may be limited in scope and

magnitude. However, as essential as political support is, it is beyond the scope of our analysis. Thus, this study does not ponder actions that may be necessary to secure political backing for implemented reforms recommended here.

Accordingly, the following describes actions that may be considered the highest priority, assuming that such political commitment exists. Figure 2 presents these ideas in a schematic form while the matrix in Table 5 (at the end of the text) describes the most important recommended policy actions and includes a subjective assessment of the degree of difficulty that may be associated with each one of the policy reforms advocated in this study.

REFORM OF THE REGULATORY FRAMEWORK

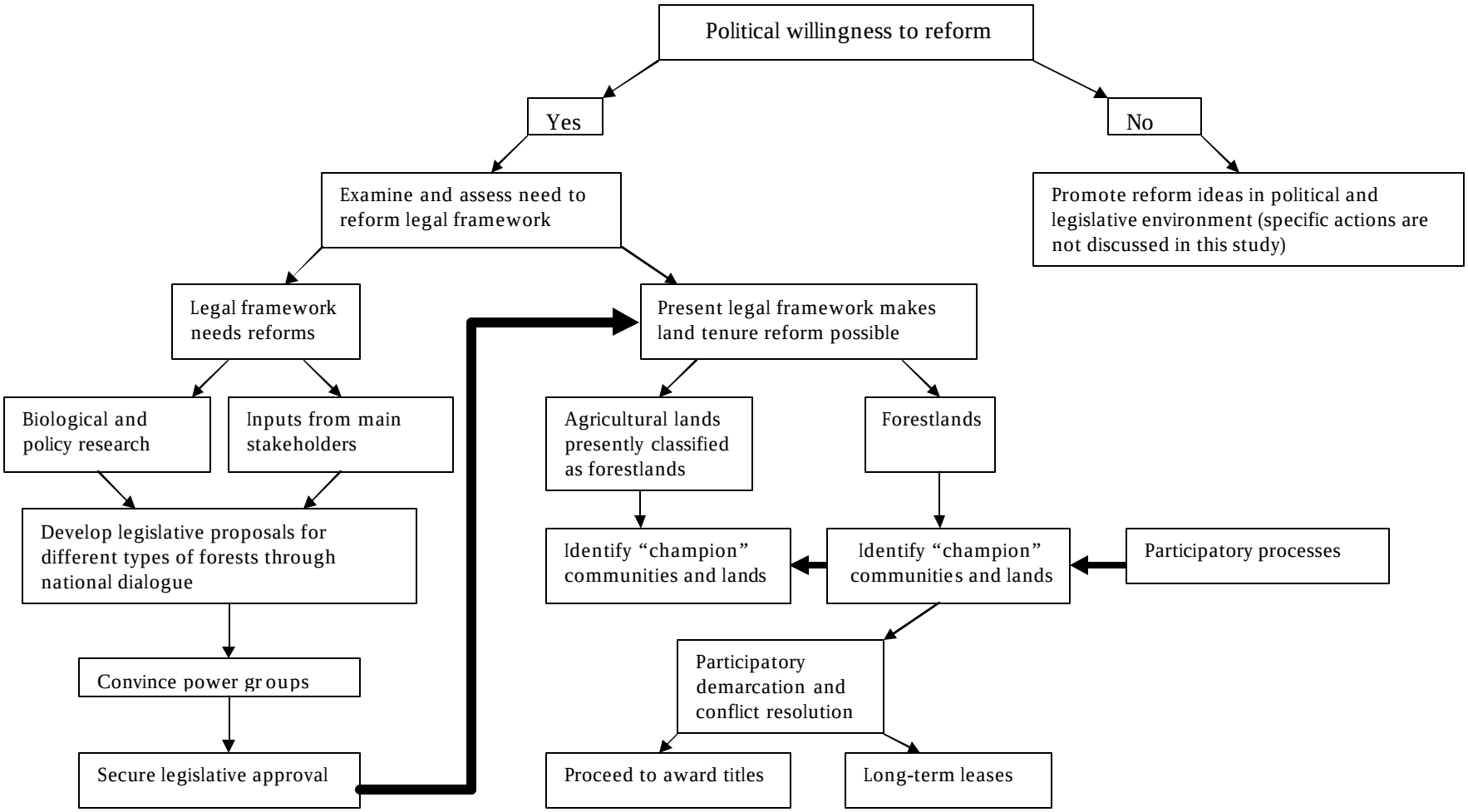
The recognition of customary rights is of such importance that it should be embodied in a broader strategy and policy for the reform of the forest estate. The recognition of customary rights requires the refinement of the legal framework so that such rights can in fact be awarded without running into legal challenges. General confusion and lack of clarity affecting Forest Zone tenure will need to be eliminated. Unrealistic over-regulation is an issue that also needs to be addressed.

The development of proposals for legislative reform will entail biophysical, socio-economic and policy research and will likely require the implementation of a series of test areas to obtain a better understanding of the gradients in local community management. Realistic proposals will also entail participatory processes and intense work to "convince" sceptics. In the past, local and international technical and financial assistance agencies have been instrumental in developing the necessary research to feed this process.

All this means that the reformulation of the legal framework will take time and effort, and this is assuming that there will be a political will to do so. Meanwhile, fortunately for reformers, there is a great deal that can be accomplished within the present legal framework. Existing law provides important opportunities for the recognitions of indigenous and other community land rights and to adopt reforms to strengthen forest tenure. For example, the fact that the Constitution and some existing legislation already open opportunities for the recognition of land rights is a positive factor. As discussed below, lands erroneously classified as Forest Zone provide a large area where action could start almost immediately. In short, a first and critical step in the reform process is to get all of the stakeholders, most important the Department of Forestry, to reach a consensus on the land status of the 120 million hectares of "Forest Zone." This analysis provides government with the opportunity to untangle itself from the web of land conflicts by accepting the legal assumption that local land rights exist until proven otherwise. Utilization of these areas for forestry purposes must then be negotiated through processes that respect the claims of local people.

Further, legal complexities can be reduced considerably if the government chooses alternatives to outright land ownership such as long-term leases, or if, as suggested below, the process takes place in a gradual manner starting with those lands where formal titling does not require legal reforms.

Figure 2: Elements of a Strategy for Forest Zone Tenure Reform



TITLE AGRICULTURAL LANDS CURRENTLY CLASSIFIED AS FOREST ZONE

There are agricultural lands now classified as Forest Zone but that in fact have no natural forest cover and that are already being managed for agriculture or plantations by local communities. Most of these lands are better used for agriculture or agroforestry. Livelihood enhancement through improved tree and crop production and market access are the priorities in these areas. There are no legal barriers to titling these lands, either communally or individually. Securing land ownership rights in these cases would profit from the use of the procedures and considerable experience that the land agency has already accumulated during the past few years. The magnitude of the titling program should be large enough for meaningful impact.

Increasing land tenure security of these communities through titling would introduce additional incentives for investment in both agroforestry and agriculture. It will also legally protect communities against land invasions, a practice that today fuels the propensity to manage forest and land resources in unsustainable ways.

AWARD LIMITED RIGHTS TO LOCAL PEOPLE TO MANAGE FOREST ZONES

In areas where local people are not claiming ownership rights but want and need access to Forest Zone long-term leases – enough to allow communities to reap returns of their management efforts – investments are a viable option. As in the case of titling agricultural lands, the scale of the leasing program should be such as to make meaningful replication possible.

Priority could be given to those parts of the Forest Zone presently managed efficiently by communities where the transaction costs are likely to be low (clear customary rights and therefore low probability of conflict, for example). Such arrangements are in fact evolving through the government's Community Forestry Program (HKM) As this program develops, it is important that it be informed by experiences with the lightly regulated Zones with Specific Purpose in Krui, Lampung. The sole act of establishing a lease would confer greater land security to the communities involved and would provide a legal shield against threats from other actors, thus freeing resources and energy from communities that are now busy defending their customary rights. It would also provide a strong signal to other communities that proper management is rewarded with a contract to control the management of forests. In some cases, leases might be an intermediate step towards the full recognition of community land ownership rights. This is sometimes referred to as the "lease it or lose it" option. For example, many customary communities in the Philippines, after leasing lands from government, were in an advantageous position to acquire land ownership rights when later on another law allowed recognition of customary rights. They were also able to do this after receiving legal support in the leasing processes that led to a provision in the leases that protected their right to claim land ownership in accordance with other law.

IMPLEMENT COMMUNITY-BASED DEMARCATION

The clear identification of community lands is extremely important to reduce transactions costs and to establish a clear basis for the enforcement of property or usufruct rights. Clear formal rights allow communities to draw on the enforcement agencies of the state. Arrangements characterized by

overlapping tenure rights covering different types of resources may be present and therefore the task of demarcating "community" lands may be complex in some cases. Conflicts will arise, particularly if resources are, or become, valuable over time. In fact, conflicts multiplied during the logging boom (Lynch and Harwell 2002). However, any agreement with communities, leases or recognition of property rights, requires proper definition of the land area involved that communities consider as their own.

Further, communities need to become legal entities to sign formal contracts with other parties, such as the government or commercial contractors. This can also be a complicated process. In theory, communities themselves should be able to define their identity but they are not always able to do so. Even if they can, the process of acquiring legal personality may be beyond their possibilities. Some analysts have proposed requiring a census of community members, all of whom would sign the title or the lease as a way to expedite the process (Lynch and Talbott 1995).

Community-mapping procedures have been developed by NGOs to help rural communities to identify areas they consider their lands and to solve internal conflicts or threats from powers outside of the community. The process of producing community land maps increases the community security of control over their lands as well as awareness of their rights and keeps government institutions one step removed from a demanding task that would absorb significant energy and resources (Lynch and Harwell 2002).

STRIVE FOR EARLY SUCCESSES

Forest Zone tenure reform continues to be a contentious issue in Indonesia. A government genuinely interested in promoting such a program would wisely keep away from initial implementation in situations that offer limited possibilities of success. Instead, the government should concentrate on a few high profile cases where the possibilities of success are high and administrative difficulties and costs are low. In the Krui communities, cases with this favorable combination exist. This approach would contribute to energize a policy that recognizes that the Krui lands have not been classified as "State Forest Zone" but some areas do fall within the more general classification of "Forest Zone" where the Department of Forestry has a say in the management of those forests but has no control over the land and cannot award forestry contracts to third parties.

In the 10 percent of the Forest Zone that has been gazetted as having no rights attached and is therefore "State Forest Zone," co-management arrangements such as the existing community forestry program (HKM) can be implemented with responsible and motivated partners. This would also reduce the demands on and make the best use of limited resources of the public forest administration. In turn, the administration could dedicate more efforts to concentrated actions in those areas where the state has either a comparative advantage or the clear responsibility to assure forest protection, such as in the management of protected areas. Successful examples could be used to publicize advantages of the program and to increase the level of support accorded to it.

STRENGTHENING OF TENURE SECURITY IN INDONESIA IS A MULTI-STAKEHOLDER ENDEAVOUR

Strengthening forest tenure is a clearly needed, albeit complicated and contentious, step towards advancing forest stewardship and human rights in Indonesia. Devising and implementing a national forest tenure reform initiative will require bold leadership from national institutions, including the Ministry of Forestry, the Bureau of Lands and the Parliament, as well as strong support of indigenous and other community groups, environmental NGOs, human rights advocates and the international donor community.

International agencies could provide conceptual support for policy reforms, lessons from international experience in similar initiatives or research inputs for a more objective national policy debate. While international assistance could be useful, in the end, progress will depend upon Indonesian leadership and political will.

Table 5: Policy Matrix

Area	Opportunities	Challenges	Corrective Actions	Potential Difficulty / Cost
Policy and Legislation	• The Constitution and some of the legislation are supportive of community rights and to some extent of land ownership rights. • Political environment after the New Order period is more open to democratic discussion of policy options and to reform.	• Agreed vision and commitment to reform needs to be achieved. • Legal framework needs to be streamlined as it is confusing, inconsistent and conflicting with a proliferation of laws, Presidential and Ministerial Decrees, Circulars etc. • Enforcement needs to be stricter, needs to close the gap between *de facto* and *de jure* situations. • The danger of reactionary responses to transfer of land ownership needs to be addressed.	• Explicitly formulate strategy. • Reform policies and legislative environment. Simplify rules to reduce discretionary powers. • Improve law enforcement. • Analyze the political economy of reform, identify winners and losers. • Produce scientific evidence of advantages and disadvantages of reform. Educate the public and disseminate information to groups/institutions that oppose reform. • Engage NGOs and reputable research institutions. • Implement pilot projects.	*** ***** ***** ** *** ** ***
Institutional Aspects	• Experience acquired in transferring forest land ownership by the Land Agency. • Some evidence of efficient and equitable forest management, some of which has been well documented. • Increased voice of NGOs concerned with community rights. • Decentralization creates new opportunities.	• Decentralization has created many problems. • Frictions and lack of cohesion between different levels of government horizontally and vertically. Lines of institutional authority and responsibility need to be rationalized. • Transition period may be long and with high costs. • Development of institutional systems to identify communities; develop criteria and install mechanisms for land allocation. • Need to have mechanisms in place for conflict resolution. • Potential area involved is substantial.	• Promote participatory decision-making. • Consider long-term leases as a first step. • Secure government and major stakeholders' commitment to reform. • Involve NGOs, facilitate participatory mapping. • Provide legal assistance to communities. • Start gradually, particularly in favorable areas where chances of success are high. • Secure international technical and financial assistance. • Rationalize inter-agency responsibilities both horizontally and vertically. • Renew efforts to support the Inter-Departmental Committee on Forestry (IDCF).	*** **** **** *** *** ** ** ***** **

Attitudes of Government Officials	• General awareness of the inefficient present system of forest land management. • Some government agencies have a positive attitude towards forest land ownership reform. • The creation of "zones with distinct purpose" proves that attitudes of high government officials are beginning to change.	• Perception that communities are incapable of managing resources for the "public good" or for "development." • Communities are perceived as "backward." • Communities will sell land. • Reliance on standard, top-down solutions. • Need to develop systems to change entrenched ways of thinking. • Need to train/educate staff. • Need to reduce the impact of "drivers" against reform, including corruption.	• Implement pilot projects. • Educate, raise awareness and emphasize scientific evidence. • Promote transparent decision-making, simplify rules to reduce discretionary decisions and foster dissemination of information.	** ** ***
Attitudes of Communities	• Level of political voice has increased since the demise of the New Order.	• Government cannot be trusted. • Only full land ownership will substantially reduce uncertainty. • Incentives to forest depletion.	• Promote participatory approaches. • Favor land ownership transfers over CFM. • Reform incentive structures.	**** *** ****
Knowledge Management	• A more open society is demanding more information. • A more open society is actively generating new knowledge and disseminating it.	• Government operations are still secretive and public servants hoard information and knowledge.	• Promote wide dissemination of information on laws and regulations, rights of communities. • Foster public hearings to examine the operations of government agencies.	**** ***

: Not difficult; ***: Highly difficult*

REFERENCES

Alcorn, J. B. 2000. An introduction to the linkages between ecological resilience and governance. In *Indigenous social movements and ecological resilience: Lessons from the Dayak of Indonesia*, ed. J.B. Alcorn and A.G. Royo. Washington DC, USA: Biodiversity Support Program, WWF/The Nature Conservancy/WRI/USAID.

Alden Wily, L., and S. Mbaya. 2001. *Land, people and forests in eastern & southern Africa at the beginning of the 21st Century: The impact of land relations of the role of communities in forest future*. Geneva, Switzerland: IUCN-EARO. 2001.

Arnold, J. E. M. 2001. Forests and people: 25 years of community forestry. Rome, Italy: FAO.

Associated Press. 2005. Indonesian court rules mining companies can operate in protected forests. July, 7 2005.

Badan Planologi Kehutanan. 2003. Pengelolan Pembangunan Kehutanan and Perkebunan yang Selaras dengan Proses Desentralisasi dan Penerapan Prisnsip prinsip Good Governance ditinjau dari Aspek Koordionasi Penyusunan Kebijakan, 14-15 Oktober 2003 Pekan Baru.

Barber, C.V. 1997. Environmental scarcities, state capacity and civil violence: The case of Indonesia. Toronto: American Academy of Arts and Sciences and University of Toronto.

Barber, C.V., and G. Churchill. 1987. Legal review of property rights in Irian Jaya. Unpublished report, on file with authors.

Barber, C.V., N. Johnson, and E. Hafild. 1994. *Breaking the logjam: Obstacles to forest policy reform in Indonesia and the United States*. Washington DC, USA: World Resources Institute.

Barber, C.V., and J. Schweithelm. 2000. *Trial by fire: Forest fires and forestry policy in Indonesia's era of crisis and reform.* Washington DC, USA: World Resources Institute.

Barr, C., E. Wollenberg, G. Limberg, N. Anau, R. Iwan. Made Sudana, M. Moeliono, and T. Djogo. 2001. *The impacts of decentralization on forests and forest-dependent communities in Malinau district, East Kalimantan.* Case study 3 on decentralization and forests in Indonesia. Bogor, Indonesia: Center for International Forestry Research.

Bennett, C. 2000. Opposition to decentralization of forest resource management in Indonesia: Sowing the seeds of future conflict. CIDA Natural Resource Management Policy under Decentralization, Bappenas-Hickling Working Paper. Quebec, Canada: CIDA.

Besley, T. 1995. Property rights and investment incentives: Theory and evidence from Ghana. *Journal of Political Economy* 103 (5): 903-937.

Brown, C., and P. D. Durst. 2003. State of forestry in Asia and the Pacific – 2003. Bangkok, Thailand: Asia-Pacific Forestry Commission, Food and Agriculture Organization of the United Nations.

Carter, J., 1999. Recent experience in collaborative forest management approaches: A review of key issues. Paper prepared for the World Bank Forest Policy Review Implementation and Strategy. Washington DC, USA.

Carter, J., and J. Gronow, 2005. Recent experience in collaborative forest management approaches. CIFOR Occasional Paper 43. Bogor, Indonesia: CIFOR.

CERD. 1997. Indigenous peoples. United Nations Committee on the Elimination of Racial Discrimination. General Recommendation XXIII. Geneva, Switzerland: Office of the United Nations High Commissioner for Human Rights.

Chidley, L., and C. Marr, ed. 2002. Forests, people and rights. A special report by Down to Earth: International Campaign for Ecological Justice in Indonesia. Online at http://dte.gn.apc.org/srfin.htm

Clay, J. W., J. B. Alcorn and J. R. Butler. 2000. Indigenous peoples, forestry management and biodiversity conservation. Report to the World Bank. Washington DC, USA: World Bank

Colchester, M., Sirait, M, Boediharji. 2003.The application of FSC principles 2 & 3 in Indonesia: Obstacles and possibilities. Jakarta, Indonesia: WALHI and AMAN.

Dala, T., and A. Jaya. 2002. Community forestry institutions, Pustaka Kehutanan Masyarakat, Yogyakarta;, Indonesia; Roshetko, Mulawarman, Santosa, Oka, ed.

Deininger, K. 2003. *Land policies for growth and poverty reduction.* World Bank Policy Research Report. Washington DC, USA: The World Bank and Oxford University Press.

de Foresta et al. 2000. Ketika Kebun berupa hutan: Sebuah Sumbangan masyarakat, ICRAF Bogor; Suhardjito, ed., 2000. Hutan Rakyat di Jawa; Peranannya dalam Ekonomi Desa, Fahutan IPB, Bogor; Jurnal Hutan Rakyat 2002, Sustensi Hutan Rakyat dan Pengelolaan DAS, Pustaka Hutan Rakyat Vol IV, no 3, Yogyakarta.

Department of Forestry. 2003. *Book of statistics.* Jakarta, Indonesia.

de Soto, H. 2000. *The mystery of capital*. New York, USA: Basic Books.

Do, Q.-T., and L. Iyer. 2003. *Land rights and economic development: Evidence from Vietnam*. World Bank Policy Research Working Paper 3120. Washington, DC: World Bank.

Dove, Michael. 1983. Theories of swidden agriculture and the political economy of ignorance. *Agroforestry Systems* (1): 85-99.

Down to Earth. 2002. No mining in the forests! No. 53-54, August 2002.

Effendi, E. 2002. Rationalizing the facts: Forest Zone rationalization in the context of local spatial planning and development programs. Paper for the World Bank. Jakarta, Indonesia.

Eghenter, C., M. Labo, and M. Farhan. 2003. Indonesia: The Dayak people in the first co-managed protected area. WRM Bulletin 73. Montevideo, Uruguay: World Rainforest Movement.

Environmental Investigation Agency. 1999. The final cut: Illegal logging in Indonesia's orangutan parks. <http://www.salvonet.com/eia/old-reports/Forests/Indonesia/FinalCut/>

Environmental Investigation Agency and Telapak Indonesia. 2001. Timber trafficking. London, UK and Bogor, Indonesia.

FAO (Food and Agriculture Organization of the United Nations). 2001. *Global forest resources assessment 2000.* FAO Forestry paper 140. Rome, Italy.

FAO (Food and Agriculture Organization of the United Nations). 2002. Proceedings: *Second experts meeting on harmonizing forest-related definitions for use by various stakeholders.* September 11-13. Rome, Italy: FAO.

Fay, C., and G. Michon. 2005. Redressing forestry hegemony: When a forestry regulatory framework is best replaced by an agrarian one. *Forest, Trees and Livelihoods.* Vol. 15.

Fay, C., and M. Sirait. 1999. Reforming the reformists in post-Suharto Indonesia. In *Which way forward? People, forests and policymaking in Indonesia,* ed. C. P. Colfer and I.A.P. Resosudarno. Washington DC, USA: Resources for the Future.

Fay, C., and M. Sirait. 2004. Indonesia's agrarian and forestry legal frameworks: Challenging the national dual system of land administration. Paper presented at the International Conference on Land Tenure, Jakarta, October 11-13, 2004.

Fay, C., M. Sirait, and A. Kusworo. 2000. *Getting the boundaries right: Indonesia's urgent need to redefine its forest state.* Bogor, Indonesia: ICRAF.

Fern (The EU Forest Campaign) Report. 2001. Forest fear: The abuse of human rights in forest conflict. Dephut-Dinas Kehutanan Kab.

Forestry Planning Agency. 1999. Recalculation of production forest zones, protected forest and conservation area. Central Forestry Mapping, Forestry Planning Board. Jakarta, Indonesia.

Forestry Planning Bureau. 2002. Cited in: Santosa, H. 2003. Forest Zone rationalization in Indonesia: A case study on the forest resource condition and policy reform. Jakarta, Indonesia: World Agroforestry Center 2003.

Forsyth, T., and M. Leach. 1998. *Poverty and environment: Priorities for research and policy, an overview study.* Brighton, UK: Institute of Development Studies.

Fourie, C., and B. Soewardi. 2000. Institutional framework reforms for land administration. LAP Report. Jakarta, Indonesia: BAPPENAS.

FWI/GFW. 2002. *The state of the forests: Indonesia.* Bogor, Indonesia: Forest Watch Indonesia; and Washington DC, USA: Global Forest Watch.

Gautam, M., U. Lele, H. Kartodiharjo, A. Khan, I. Erwinsyah, and S. Rana 2000. *Indonesia. The challenges of World Bank involvement in forests.* Operations Evaluation Department, Evaluation Country Case Study Series. Washington DC, USA: World Bank.

Global Forest Watch. 2004. Map viewer for Indonesia's forests. www.globalforestwatch.org.

Government of Indonesia (GOI). 2001. Strategic framework and action plan. Kerinci Seblat National Park Integrated Conservation and Development Project, Government of Indonesia, 16 May.

Griffen, V. 2001. *Seeing the forest for the people: A handbook on gender, forestry and rural livelihoods.* Kuala Lumpur, Malaysia: Asian and Pacific Development Centre.

Hardin, G. 1968. The tragedy of the commons. *Science* 162: 1243-1248.

Harsono, B. 1977. *Indonesian agrarian law: The history, shaping and content of basic agrarian law.* Jakarta, Indonesia: Djambatan Publishing.

Harsono, B. 1997. Hukum Agraria Indonesia; Sejarah Pembentukan UUPA, Isi dan Pelaksanaannya, jilid 1. Jakarta, Indonesia: Djambatan Publishing.

Hirschmannn, A.O. 1984. *Getting ahead collectively: Grassroots experiences in Latin America*. New York, NY, USA: Pergamon Press.

Holmes, D. 2002. *Where have all the forests gone?* World Bank Discussion Paper. Environment and Social Development, South Asia and the Pacific Region. Washington DC, USA: World Bank.

Human Rights Watch. 2003. *Without remedy: Human rights abuse and Indonesia's pulp and paper industry.* New York, USA: Human Rights Watch.

International Institute for Environment and Development (IIED). 1994. Whose Eden? An overview of community approaches to wildlife management. A report to ODA. July 1994.

ILO. 1989. Convention 169 on indigenous and tribal peoples. General Labor Conference of the International Labor Organization. Geneva, Switzerland.

Indonesia, Kerinci Seblat National Park Integrated Conservation and Development Project. 2001. Strategic framework and action plan. May 16.

Indonesian Constitution. http://www.indonesiamission-ny.org/issuebaru/HumanRight/1945cons.htm

Indrawati, S.M (moderator). 2002. US-Indonesia Society Discussion: A view from the provinces. Perspectives of the new generation. US-Indonesia Society: Washington, DC. <http://www.usindo.org/Briefs/Perspectives%20of%20the%20New%20Generation.htm>

Institut Pertanian Bogor. 2002. *Financial and comparative analysis*. Study prepared for the World Bank. Bogor, Indonesia.

Jarvie, J., M. Malley, N. Manembu, D. Raharjo, and T. Roule. 2003. *Indonesia. Conflict timber: Dimensions of the problem in Asia and Africa.* Washington DC, USA: ARD Inc.

Kartodiharjo, H. 1999. *Forest management policy reform in Indonesia: The need of accountable direction.* Quoted in Gautam et al. 2000.

Kartodiharjo, H. 2002. Structural problems in implementing new forestry policies. In *Which way forward? People, forests and policymaking in Indonesia,* ed. C. P. Colfer and I.A.P. Resosudarno. Washington DC, USA: Resources for the Future.

KUDETA. 1998. Return natural resources to the people! Jakarta, Indonesia: KUDETA.

Kusworo, A. 2000. Forest squatters or black sheep? A review of Forest Zone conflict in West Lampung Indonesia. ICRAF-IRD-WATALA. Bogor, Indonesia: LATIN.

Lachowski, H., P. Maus, G. Man, C. Dull, G. Applegate, and Suyanto. 2002. Behind Indonesia's El Niño fires. USDA Forest Service International Programs Global Leaflet Issue 1, April. Washington DC, USA: USDA.

Litski, J. 2004. Forest products: Fact sheet 8. Gesellschaft für Technische Zusammenarbeit. September.

Lynch, O. J. 1992. Colonial legacies in a fragile republic: A history of Philippines land law and state formation with emphasis on the early U.S. regime. Doctor of Laws Dissertation, Yale University.

Lynch, O. J. 1999. Promoting legal recognition of community-based property rights, including the commons: Some theoretical considerations. Paper for the Symposium of the International Association for the Study of Common Property and the Workshop on Political Theory and Policy Analysis, June 7, Indiana University, Bloomington, Indiana, USA.

Lynch, O. J., and E. Harwell. 2002. *Whose resources, whose common good? Towards a new paradigm of environmental justice and national interest in Indonesia.* Washington DC, USA: Center for International Environmental Law.

Lynch, O.J., and K. Talbott. 1995. *Balancing acts: Community-based forest management and national law in Asia and the Pacific.* Washington DC, USA: World Resources Institute.

Ma, J. and B. Hofman. 2000. *Indonesia's decentralization after crisis.* World Bank Public Sector PREM Notes No. 43. Washington DC, USA.

McCarthy, J. F. 2000. "The changing regime: Forest property and reformasi in Indonesia." *Development and Change* 31(1): 155-177.

Michon G., and H. de Foresta. 1990. Complex agroforestry systems and conservation of biological diversity 1/ Agroforestry in Indonesia, a link between two worlds. In *Harmony with nature: An international conference on the conservation of tropical biodiversity*, Kuala Lumpur, Malaysia, The Malayan Nature Journal. Golden Jubilee Issue vol. 45: 457-473.

Millennium Ecosystem Assessment. 2004. *Ecosystems and human well-being: Synthesis.* Washington, DC: World Resources Institute and Island Press.

Ministerial Decision 5. 1999. Ministry of Internal Affairs. Jakarta, Indonesia.

Molnar, A., S. Scherr and A. Khare. 2004. *Who conserves the world's forests? Community-driven strategies to protect forests and respect rights.* Washington DC, USA: Forest Trends and Ecoagriculture Partners.

Mukherjee, N., J. Hardjono, and E. Carriere. 2002. *People, poverty and livelihoods: Links for sustainable poverty reduction in Indonesia.* Jakarta, Indonesia: DFID/World Bank.

Ostrom, E. 1990. *Governing the commons: The evolution of institutions for collective action.* New York, USA: Cambridge University Press.

Peluso, N. 1992. *Rich forests, poor people.* Berkeley, USA: University of California Press.

Potter, L., and J. Lee. 1998. *Tree planting in Indonesia: Trends, impacts and directions*. Occasional Paper 18. Bogor, Indonesia: CIFOR.

Proceedings of Legal Harmonization Meeting, November 2003. University of Gadah Mada, Yogyakarta, Indonesia. Unpublished, on file with the authors.

Program Pembanguan Nasional. National Development Plan. 2003. National Planning Agency (BAPPENAS), Jakarta, Indonesia.

Rencana Stratejik. Strategic Plan 2001-2005. Jakarta, Indonesia: Department of Forestry

Santoso, H. 2002. Study of the condition of forest resources and policy reform. Paper for the World Bank. Jakarta, Indonesia.

Schroth, G., G.A.B. da Fonseca, C.A. Harvey, C. Gascon, H.L. Vasconcelos, and A.M.N. Izac. 2004. *Agroforestry and biodiversity conservation in tropical landscapes. A synthesis.* Washington DC, USA: Island Press.

Scotland, N. 2000. Indonesia country paper on illegal logging. Paper prepared for the World Bank-WWF Workshop on Control of Illegal Logging in East Asia, August 28, Jakarta, Indonesia.

Scott, P. 2001. Feasibility study for collaborative management of special-use forests in Vietnam. Consultancy report submitted to the Non-Timber Forest Products Project, Hanoi, Vietnam.

Sembiring, S. 2002. Indonesia: Towards rationalization of State Forest Zone. Policy regulations and institutions. Paper for the World Bank. Jakarta, Indonesia.

Seymour, F., and H. Kartodiharjo. 2000. Indonesia. In *The right conditions*, ed. F. Seymour and N. Dubash. Washington DC, USA: World Resources Institute.

Shackleton, S., B. Campbell, E. Wollenberg, and D. Edmunds. 2002. Devolution and community-based natural resource management: Creating space for local people to participate and benefit. *ODI Natural Resources Perspectives* 76 (March). London, UK: ODI.

Shepherd, G. 1992. *Managing Africa's tropical dry forests: A review of indigenous methods.* Agricultural Occasional Paper 14, London, United Kingdom: Overseas Development Institute.

Soemardjono M.S.W. 2001. Kebijakan Pertanahan: dari Regulasi dan Implementasi, Kompas. Jakarta, Indonesia.

Sunati, A. 2003. Konsepsi yang Mendasari Penyempurnaan Hukum Tanah Nasional, University of Indonesia, Jakarta.

Sunderlin, W.D., I.A.P. Resosudarmo, E. Rianto, and A. Angelsen. 2000. *The effect of Indonesia's economic crisis on small farmers and natural forest cover in the Outer Islands.* Occasional Paper No. 28. Bogor, Indonesia: Center for International Forestry Research.

Swallow, B., J. Wangila, W. Mulati, O. Okello, and N. Mc Carthy. Collective action in space: Assessing how collective action varies across an African landscape. CAPRI Working Paper 5. Washington, DC: IFPRI.

Tacconi L, I. Kurniawan. 2005. Deforestation and forest degradation in Indonesia. CIFOR Draft Working Paper. Bogor, Indonesia: Center for International Forestry Research.

Thamrin, J. 2002. Overview of policies and problems of non-forest lands. Paper for the World Bank. Jakarta, Indonesia.

United Nations General Assembly. 1948. *Universal declaration of human rights.* Resolution 217 A (III) of December 10. New York, USA.

van Noordwijk, M., D. Murdiyarso, K. Hairiah, U. R. Wasrin, A. Rachman, and T. P. Tomich. 1998. Forest soils under alternatives to slash-and-burn agriculture in Sumatra, Indonesia. In *Soils of tropical forest ecosystems: Characteristics, ecology and management,* ed. A. Schulte and D. Ruhiyat. Berlin: Springer Verlag.

White, A., and A. Martin. 2002. *Who owns the world's forests? Forest tenure and public forests in transition.* Washington DC, USA: Forest Trends.

White, A. and A. Martin. 2003. *Strategies for strengthening community property rights over forests: Lessons and opportunities for practitioners.* Washington DC, USA: Forest Trends.

Williamson, I. P. 2000. Best practices for land administration systems in developing countries. Paper presented at the International Conference on Land Policy Reform, July 25-27, Jakarta, Indonesia.

Wollenberg, E., and H. Kartodiharjo. 2002. Devolution and Indonesia's new basic forestry law. In *Which way forward? People, forests, and policymaking in Indonesia,* ed. C. P. Colfer and I. A. P. Resosudarmo. Washington DC, USA: Resources for the Future.

World Bank. 2000. *World development report 2000/2001: Attacking poverty.* Washington DC, USA: World Bank.

World Bank. 2001. *Indonesia: Environment and natural resource management in a time of transition.* Washington DC, USA: World Bank.

World Bank. 2002. *An impact evaluation of systematic land titling under the land administration project (LAP)*. Jakarta, Indonesia: SMERU Research Institute and World Bank.